CA2 ALPH
A56
1928

ALBERTA LEGISLATURE LIBRARY
3 3398 00421 3004

LEGISLATURE LIBRARY
FEB 19 2016
EDMONTON

ANNUAL REPORT

OF THE

Department of Public Health

OF THE

PROVINCE OF ALBERTA

1928-29

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

EDMONTON:
PRINTED BY W. D. McLEAN, KING'S PRINTER
1930

(Sessional Paper No. 6, 1929)

Digitized by the Internet Archive
in 2020 with funding from
Legislative Assembly of Alberta - Alberta Legislature Library

ANNUAL REPORT

OF THE

Department of Public Health

OF THE

PROVINCE OF ALBERTA

1928-29

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

EDMONTON:
PRINTED BY W. D. McLEAN, KING'S PRINTER
1930

(Sessional Paper No. 6, 1929)

Edmonton, November 15, 1929.

To His Honour

WILLIAM EGBERT,
Lieutenant Governor of the Province of Alberta.

SIR,—

I have the honour to transmit herewith the Annual Report of the Department of Public Health for the year 1928.

I have the honour to be, Sir,

Your obedient servant,

GEORGE HOADLEY,
Minister of Health.

Edmonton, November 15, 1929.

To the Honourable George Hoadley,
Minister of Health,

Parliament Buildings, Edmonton, Alberta.

Sir,—

I have the honour to submit the Tenth Annual Report of the Department of Public Health.

The Department is divided into the following Branches:

1. Communicable Diseases.
2. Hospital Inspection and Coroner's Supervision of Operations.
3. Laboratory.
4. Nursing.
5. Hospitals, Charity and Relief.
6. Social Hygiene.
7. Public Health Education.
8. Sanitary Engineering and Sanitation.
9. Provincial Dentist.
10. Institutions: Central Alberta Sanatorium.
    Provincial Mental Hospital.
    Provincial Mental Institute.
    Provincial Training School.
    Provincial Special Hospital.

Seventy-one licenses were issued under The Private Hospitals Act during the year 1928. Seventy-one Private Hospitals were in operation at December 31, 1928.

Thirty persons received free Insulin during the year.

I have the honour to be, Sir,

Your obedient servant,

M. R. Bow, B.A., M.D., C.M., D.P.H.,
Deputy Minister.

Communicable Diseases Branch

(R. B. Jenkins, M.C., M.D., *Provincial Medical Officer*)

The following is a table showing the number of cases of communicable diseases which occurred in the Province in 1928 as compared with that of 1927:

Disease.	1928.	1927.
Anterior Poliomyelitis	92	353
Cerebro-Spinal Meningitis	54	15
Chickenpox	1,522	837
Diphtheria	485	235
Encephalitis Lethargica	6	2
Erysipelas	85	36
German Measles	21	56
Measles	892	336
Mumps	1,277	1,216
Ophthalmia Neonatorum	....	2
Puerperal Fever	....	1
Scarlet Fever	1,397	1,275
Smallpox	254	481
Tuberculosis	168	90
Typhoid Fever	122	74
Whooping Cough	492	334
	6,867	5,343

TOTAL DEATHS DUE TO COMMUNICABLE DISEASE IN THE PROVINCE OF ALBERTA DURING THE YEAR 1928.

Pneumonia (all forms)	414	Meningococcus Meningitis	29
Influenza	284	Typhoid Fever	28
Pulmonary Tuberculosis	175	Erysipelas	26
Tuberculosis (all other forms)	60	Scarlet Fever	24
Diphtheria	50	Encephalitis Lethargica	19
Whooping Cough	37	Measles	18
Poliomyelitis	35	Smallpox	0

DEATHS DUE TO COMMUNICABLE DISEASES IN THE CITIES OF EDMONTON AND CALGARY DURING THE YEAR 1928.

Pneumonia (all forms)	104	Meningococcus Meningitis	6
Influenza	83	Typhoid Fever	7
Pulmonary Tuberculosis	52	Erysipelas	11
Tuberculosis (all other forms)	20	Scarlet Fever	2
Diphtheria	14	Encephalitis Lethargica	9
Whooping Cough	8	Measles	8
Poliomyelitis	9	Smallpox	0

DEATHS DUE TO COMMUNICABLE DISEASES IN THE SMALL CITIES, TOWNS, VILLAGES AND RURAL DISTRICTS DURING THE YEAR 1928.

Pneumonia (all forms)	310	Meningococcus Meningitis	23
Influenza	201	Typhoid Fever	21
Pulmonary Tuberculosis	123	Erysipelas	15
Tuberculosis (all other forms)	40	Scarlet Fever	22
Diphtheria	36	Encephalitis Lethargica	10
Whooping Cough	29	Measles	10
Poliomyelitis	26	Smallpox	0

Typhoid Fever.

122 *cases*—28 *deaths.*

It appears from inspection of the number of cases and the number of deaths that there was an unusually high mortality or there have been numerous other cases which were not reported.

A considerable number of the cases reported as from the cities are of rural origin, and an attempt is being made to have these properly allocated in future.

Scarlet Fever.

1,397 *cases*—24 *deaths.*

The type of Scarlet Fever continues to be mild. One of the difficulties in the control of this disease is the fact that a proportion of these mild cases escapes recognition. and thus becomes a serious factor in the spread of the infection. The Department is endeavoring to stress the importance of searching for these cases and taking the necessary steps in the matter of quarantine and other control measures found necessary.

Diphtheria.

485 *cases*—50 *deaths.*

Despite the efforts being made to popularize the use of Diphtheria Toxoid, the recognized preventive of Diphtheria, during this year the incidence of Diphtheria shows that several local boards have not taken the matter sufficiently seriously.

Inspection of the detailed table shows that where the work has been carried on intensively there is a considerable reduction in the incidence of the disease.

Smallpox.

254 *cases*—0 *deaths.*

The majority of these cases were of the mild type, and localized outbreaks resulted from failure to detect the nature of the disease in the first instance.

No serious outbreaks were reported during the year.

Cerebro-spinal Meningitis.

54 *cases*—29 *deaths.*

There has continued to be certain ambiguity in the reporting of Meningitis. Cases are being reported as Meningitis without properly defining the cause, which may be the organisms of Influenza, Pneumonia, etc., or fairly frequently Streptococci.

Closer enquiry is being made in each case reported, so that only the communicable form, produced by the Meningococcus, will be recorded.

Pulmonary Tuberculosis.

168 *cases*—175 *deaths.*

Greater activity on the part of the local boards would result in better reporting of these cases, the logical result of which would be better control of the disease.

Poliomyelitis.

92 *cases*—35 *deaths.*

The wave of incidence of Poliomyelitis is gradually falling, as is expected after such an outbreak as that of 1927.

Districts which were unaffected in previous years appear to have suffered comparatively heavily.

Mr. Zalizniak, Health Inspector, during the year visited 290 districts, vaccinated 2,051 persons, immunized 1,349 persons, made 16 special investigations, and gave a number of lectures with a view to the education of the people in these districts concerning their responsibility in public health matters.

WHOOPING COUGH

1928	Sex		MONTHS												AGES								TOTAL
	M.	F.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-24	25-44	45-59	60-69	70-over	
Cities:																							
Calgary	22	19	1	2	—	2	11	—	2	5	1	15	2	—	11	18	9	3	—	—	—	—	41
Edmonton	165	149	—	—	41	—	21	—	—	63	62	75	52	—	78	197	27	9	3	—	—	—	314
Lethbridge	1	1	—	—	—	—	—	—	2	—	—	—	—	—	—	1	1	—	—	—	—	—	2
Towns and Villages	17	14	—	1	1	3	2	3	—	2	4	3	6	6	3	13	15	—	—	—	—	—	31
Rural Districts	46	58	—	1	—	9	6	21	2	9	27	15	7	7	10	45	41	8	—	—	—	—	104
Totals	251	241	1	4	42	14	40	24	6	79	94	108	67	13	102	274	93	20	3	—	—	—	492

TUBERCULOSIS

Cities:																							
Calgary	18	20	1	—	4	4	7	3	5	1	4	4	4	1	—	—	4	7	21	6	—	—	38
Edmonton	37	24	—	6	11	8	16	1	3	2	2	9	2	1	—	—	2	14	35	9	1	—	61
Towns and Villages	16	13	6	1	7	3	2	—	2	1	1	2	2	2	—	1	—	2	16	7	3	—	29
Rural Districts	18	22	4	4	2	6	4	2	1	4	1	6	3	3	1	—	1	12	22	4	—	—	40
Totals	89	79	11	11	24	21	29	6	11	8	8	21	11	7	1	1	7	35	94	26	4	—	168

DIPHTHERIA

Cities:																							
Calgary	61	63	4	2	3	3	5	2	4	15	25	26	23	12	1	22	80	7	12	2	—	—	124
Edmonton	25	28	15	7	2	2	3	2	1	1	6	2	8	4	5	12	21	11	4	—	—	—	53
Lethbridge	4	7	1	—	1	—	3	—	—	4	—	1	1	—	1	1	5	2	2	—	—	—	11
Medicine Hat	59	80	1	2	8	9	3	7	8	10	31	34	18	8	—	16	70	39	12	2	—	—	139
Towns and Villages	27	40	1	3	3	1	1	2	2	4	11	23	5	11	—	7	34	17	9	—	—	—	67
Rural Districts	42	49	5	3	8	6	3	4	10	8	11	13	13	7	2	9	50	20	7	3	—	—	91
Totals	218	266	27	17	25	21	18	17	25	42	84	99	68	42	9	67	260	96	46	7	—	—	485

SMALLPOX

Cities:																							
Calgary	2	1	—	1	1	—	—	—	—	—	—	—	—	1	1	—	—	—	1	1	—	—	3
Edmonton	10	13	2	9	7	3	—	—	—	1	—	—	—	1	2	1	1	9	8	2	—	—	23
Lethbridge	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Medicine Hat	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
Wetaskiwin	3	2	1	1	—	1	—	—	—	1	—	—	—	1	—	—	—	1	3	1	—	—	5
Towns and Villages	26	25	8	—	8	10	14	1	2	—	—	3	2	3	—	2	30	10	6	3	—	—	51
Rural Districts	112	58	18	14	32	2	21	6	12	31	—	9	10	15	1	13	58	36	46	15	1	—	170
Totals	155	99	29	26	48	16	36	7	14	33	—	12	12	21	4	16	89	57	65	22	1	—	254

CHICKENPOX

Cities:																							
Calgary	216	240	37	53	—	29	38	—	35	5	24	109	126	—	11	37	390	6	6	6	—	—	456
Edmonton	293	263	—	—	45	—	33	—	—	23	48	185	222	—	13	43	468	9	11	12	—	—	556
Lethbridge	35	45	—	—	—	—	1	—	5	—	10	24	32	8	2	7	68	1	1	1	—	—	80
Medicine Hat	1	2	—	—	—	—	—	—	—	—	—	2	1	—	—	—	3	—	—	—	—	—	3
Wetaskiwin	3	5	—	—	—	—	—	—	—	—	—	—	—	8	1	1	6	—	—	—	—	—	8
Towns and Villages	99	99	13	14	4	5	14	39	12	2	2	45	37	11	1	43	132	15	7	—	—	—	198
Rural Districts	106	115	14	16	6	12	7	11	14	9	8	34	56	34	3	24	176	12	4	2	—	—	221
Totals	753	769	64	83	55	46	93	50	66	39	92	399	474	61	31	155	1243	43	29	21	—	—	1522

MUMPS

Cities:																							
Calgary	270	232	14	43	56	53	55	—	11	6	10	30	113	111	24	68	251	130	23	6	—	—	502
Edmonton	219	189	30	17	8	27	22	20	17	6	17	16	65	163	18	52	204	112	17	3	2	—	408
Lethbridge	40	29	—	—	—	21	37	2	2	2	—	1	4	—	—	—	67	1	1	—	—	—	69
Medicine Hat	3	6	—	1	—	—	—	—	—	—	—	—	—	8	—	—	9	—	—	—	—	—	9
Wetaskiwin	1	4	—	2	—	1	—	1	—	—	—	—	—	1	—	1	3	—	1	—	—	—	5
Towns and Villages	97	83	4	4	4	2	6	4	5	1	10	38	63	39	1	14	130	21	11	2	1	—	180
Rural Districts	60	44	9	1	1	10	3	7	6	6	1	12	26	22	—	6	60	29	8	1	—	—	104
Totals	690	587	57	68	69	114	123	34	41	21	38	97	271	344	43	141	724	293	61	12	3	—	1277

POLIOMYELITIS

1928	Sex		MONTHS												AGES								TOTAL
	M.	F.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-24	25-44	45-59	60-69	70-over	
Cities:																							
Calgary	8	2	—	1	—	—	—	—	—	3	4	—	2	—	—	3	5	1	1	—	—	—	10
Edmonton	3	8	—	—	—	—	1	—	2	1	3	2	2	—	1	3	7	—	—	—	—	—	11
Lethbridge	4	3	—	—	—	—	—	—	—	1	3	3	—	—	—	2	2	1	2	—	—	—	7
Medicine Hat	1	2	—	—	—	—	—	—	—	1	2	—	—	—	—	1	1	—	1	—	—	—	3
Red Deer	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	1
Towns and Villages	8	8	2	—	—	—	—	1	2	4	4	2	—	1	—	1	11	3	1	—	—	—	16
Rural Districts	30	14	1	3	—	2	—	2	3	8	13	8	4	—	1	14	20	7	2	—	—	—	44
Totals	55	37	3	4	—	2	1	3	7	19	29	15	8	1	2	24	47	12	7	—	—	—	92

TYPHOID FEVER

Cities:																							
Calgary	8	7	—	2	3	—	—	3	1	3	—	—	3	—	—	1	8	3	2	1	—	—	15
Edmonton	9	11	—	5	3	3	—	—	2	2	1	2	2	—	—	2	7	6	4	1	—	—	20
Lethbridge	16	10	—	3	4	—	—	11	1	3	—	1	1	2	—	—	4	8	12	2	—	—	26
Towns and Villages	14	7	1	3	3	—	—	—	—	1	3	7	2	1	—	—	6	6	9	—	—	—	21
Rural Districts	35	5	3	9	10	5	2	3	—	—	4	3	1	—	—	5	11	12	11	1	—	—	40
Totals	82	40	4	22	23	8	2	17	4	9	8	13	9	3	—	8	36	35	38	5	—	—	122

MEASLES

Cities:																							
Calgary	33	41	3	2	—	10	2	—	15	1	3	4	34	—	3	19	47	2	3	—	—	—	74
Edmonton	205	171	—	—	3	—	91	—	—	7	7	73	195	—	43	96	213	11	7	6	—	—	376
Lethbridge	3	7	—	—	—	3	1	2	2	—	—	—	1	1	—	1	8	1	—	—	—	—	10
Medicine Hat	3	2	1	2	—	—	—	1	—	1	—	—	—	—	—	—	5	—	—	—	—	—	5
Wetaskiwin	1	4	—	—	—	—	—	—	—	—	—	—	1	4	—	—	4	1	—	—	—	—	5
Towns and Villages	109	104	24	28	10	16	46	52	5	1	1	—	2	28	5	41	154	10	3	—	—	—	213
Rural Districts	112	97	—	1	8	14	33	48	28	11	11	2	5	48	5	36	138	22	8	—	—	—	209
Totals	466	426	28	33	21	43	173	103	50	21	22	79	238	71	56	193	569	47	21	6	—	—	892

GERMAN MEASLES

Towns and Villages	4	6	—	—	—	4	2	—	1	—	—	1	—	2	—	2	8	—	—	—	—	—	10
Rural Districts	5	6	2	—	—	—	3	—	1	—	1	—	1	3	3	2	4	2	—	—	—	—	11
Totals	9	12	2	—	—	4	5	—	2	—	1	1	1	5	3	4	12	2	—	—	—	—	21

SCARLET FEVER

Cities:																							
Calgary	185	246	28	31	43	41	31	28	10	14	31	28	78	68	—	84	267	43	31	6	—	—	431
Edmonton	82	120	16	26	12	15	12	5	7	10	15	15	31	38	2	29	101	51	19	—	—	—	202
Lethbridge	40	34	3	1	5	—	12	20	6	5	4	4	7	7	—	15	51	6	2	—	—	—	74
Medicine Hat	16	14	2	1	4	1	7	6	2	—	1	3	1	2	—	5	19	4	2	—	—	—	30
Red Deer	7	16	—	4	10	5	3	1	—	—	—	—	—	—	—	5	14	1	3	—	—	—	23
Towns and Villages	96	90	9	7	20	13	15	7	5	21	15	15	43	16	3	35	110	18	20	—	—	—	186
Rural Districts	238	213	31	32	27	34	29	25	25	21	33	51	68	75	5	74	296	50	26	—	—	—	451
Totals	664	733	89	102	121	109	109	92	55	71	99	116	228	206	10	247	858	173	103	6	—	—	1397

CEREBRO-SPINAL MENINGITIS

1928	Sex		MONTHS												AGES								TOTAL
	M.	F.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-24	25-44	45-59	60-69	70-over	
Cities:																							
Calgary	2	—	—	—	1	—	—	—	—	1	—	—	—	—	—	—	2	—	—	—	—	—	2
Edmonton	4	3	—	—	—	1	3	—	—	2	1	—	—	—	—	3	—	3	—	1	—	—	7
Lethbridge	—	4	1	1	—	1	—	—	—	1	—	—	—	—	—	1	—	2	1	—	—	—	4
Medicine Hat	2	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	1	1	—	—	—	—	2
Towns and Villages	15	9	—	6	8	1	2	1	—	1	—	5	—	—	1	4	11	6	2	—	—	—	24
Rural Districts	12	3	4	1	—	1	2	1	—	1	1	—	2	2	2	1	9	1	2	—	—	—	15
Totals	35	19	5	8	9	4	8	2	—	7	2	5	2	2	3	9	23	13	5	1	—	—	54

ERYSIPELAS

Cities:																							
Calgary	10	5	2	—	4	—	—	2	1	2	1	1	1	1	—	—	—	1	7	5	1	1	15
Edmonton	26	19	6	5	1	7	1	3	4	—	3	4	2	9	2	—	1	4	21	15	2	—	45
Towns and Villages	8	4	—	1	4	—	2	2	—	—	—	—	2	1	1	1	—	4	4	2	—	—	12
Rural Districts	5	5	—	1	2	—	6	1	—	—	1	—	2	—	1	—	—	3	5	1	2	1	13
Totals	52	33	8	7	11	7	9	8	5	2	5	5	7	11	4	1	1	12	37	23	5	2	85

ENCEPHALITIS LETHARGICA

Cities:																							
Calgary	1	1	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	2	—	—	—	2
Towns and Villages	4	1	—	—	1	2	—	—	—	—	—	—	1	—	—	—	1	—	3	—	—	—	4
Totals	5	1	—	—	1	3	—	—	—	—	—	—	1	1	—	—	1	—	5	—	—	—	6

Hospital Inspection Branch
AND
Coroner's Supervision of Operations

(E. A. Braithwaite, M.D., L.M.C.C., *Inspector of Hospitals.*)

During the year I inspected all the approved hospitals in the Province.

The total number of operations, taken from the weekly hospital operation reports, was 23,158, and the number of deaths following operations, 441.

The following is a list of operations performed and deaths which occurred in the approved, municipal, and private hospitals during the year 1928:

	Approved H.	Deaths	Munic. H.	Deaths	Private H.	Deaths
Abscess	657	11	19	5	9	0
Abortion	404	5	12	0	16	0
Accidents—						
Mine	5	5	0	0	0	0
Rail–Road	1	1	0	0	0	0
Injury	17	17	3	3	0	0
Adenitis	14	0	5	0	0	0
Adenoma	13	0	13	0	0	0
Adenoidectomy	77	0	30	0	2	0
Adhesions	221	0	7	0	2	0
Amputation	302	9	13	2	4	0
Antrum	100	1	8	0	1	0
Appendectomy	2741	80	195	17	46	3
Articulation	0	0	1	0	0	0
Astragalectomy	0	0	1	0	0	0
Arthritis	0	0	1	0	0	0
Aspirate	31	3	1	1	0	0
Blood Transfusion	0	6	0	0	0	0
Bone Removed	0	0	5	0	0	0
Bowel Obstruction	0	0	15	0	0	0
Breast Amputation	47	0	25	0	1	0
Breast Tumour	2	0	2	0	1	0
Bullet Wound	0	0	6	0	0	0
Burns	3	0	0	0	0	0
Bunions	1	0	4	0	0	0
Corns	14	0	3	0	0	0
Caecopexy	15	0	4	0	0	0
Cancer	62	89	15	9	1	1
Caesarian Section	33	4	1	1	1	1
Carbuncle	15	0	18	0	1	0
Cartilage	14	0	3	0	0	0
Cataract	65	1	5	0	0	0
Cauterization	83	0	3	0	0	0
Cellulitis	33	1	5	0	0	0
Cervix Operations	98	2	32	0	1	0
Cholelithiasis	0	0	4	1	0	0
Cholecystectomy	139	18	35	1	4	0
Circumcision	303	0	18	0	14	0
Cleft Palate	0	0	13	1	0	0
Club Feet	17	0	6	0	0	0
Colostomy	14	4	4	1	0	0
Colporrhaphy	31	0	15	0	0	0
Curretage of Uterus	103	0	23	0	10	0
Curretement and Dilate	168	0	16	0	0	0
Cysts	247	0	18	0	0	0
Cystoscopy	170	0	10	0	0	0
Cystocele	28	0	5	0	0	0
Cystotomy	39	3	15	0	0	0

	Approved H.	Deaths	Munic. H.	Deaths	Private H.	Deaths
Dislocations	48	0	6	0	0	0
Disarticulation	0	0	4	0	0	0
Diverticulum	0	0	3	0	0	0
Dilatation	0	0	12	0	0	0
Decompression	0	0	1	0	0	0
Deformity	0	0	1	0	0	0
Ectopic	32	0	7	4	0	0
Ear Drum	0	0	3	0	0	0
Empyema	14	0	0	0	0	0
Epididymitis	0	0	7	1	0	0
Ethmoids	14	0	7	0	0	0
Enucleate Eye	66	0	3	0	2	0
Exarteritis	0	0	6	0	0	0
Examination	116	0	4	0	3	0
Foreign Body	68	2	24	0	2	0
Fibroid	14	1	10	0	0	0
Fistula	17	0	23	0	2	0
Fissure	0	0	3	0	0	0
Fistula in Ano	0	0	8	0	0	0
Frost Bite	0	0	4	0	0	0
Frontal Sinus	0	0	2	0	0	0
Fracture	928	4	23	0	8	0
Furuncle	0	0	28	0	0	0
Gastro–Enterostomy	256	0	14	0	0	0
Gastropexy	0	0	6	0	0	0
Glands Removed	96	0	10	0	0	0
Glaucoma	0	0	1	0	0	0
Growth	78	0	18	0	1	0
Gunshot Wounds	14	1	13	1	1	0
Gangrene	0	0	7	0	0	0
Genu–Valgum	0	0	0	0	0	0
Haemorrhage	46	0	7	0	1	0
Haemorrhoids	221	0	14	0	17	0
Hare Lip	0	0	11	0	0	0
Hernia	542	10	39	3	10	0
Hess Operation	0	0	2	0	0	0
Hymen Imperforate	0	0	3	0	0	0
Hydrocele	48	0	18	0	1	0
Hysterectomy	334	5	34	0	1	0
Infections	85	0	19	0	1	0
Intestinal Obstruction	0	0	15	0	0	0
Intusseusception	0	0	11	9	0	0
Iredectomy	0	0	9	0	0	0
Ischiorectal Abscess	37	0	2	0	0	0
Jejunostomy	0	4	0	0	0	0
Keloid	0	0	3	0	0	0
Kidney Suspension	0	0	5	0	0	0
Lacerations	85	0	24	0	0	0
Laparotomy	100	7	10	2	1	0
Laminectomy	0	0	1	0	0	0
Ligation	15	0	16	0	0	0
Lipoma	32	0	9	0	1	0
Lupus	0	0	1	0	0	0
Lithocenosis	0	0	3	0	0	0
Mastoid	166	15	16	1	4	0
Myomectomy	15	0	1	0	0	0
Manipulation	13	0	0	0	0	0
Mastitis	0	0	10	0	0	0
Mole	0	0	4	0	0	0
Meningitis	0	0	2	0	0	0
Menorrhagia	0	0	2	0	0	0
Necrosis	14	0	6	0	0	0
Nephrotomy	17	3	19	0	0	0
Nephritis	0	0	0	0	0	0
Neuralgia	0	0	2	0	0	0
Oesophagus Dilate	32	2	10	0	0	0
Ordidectomy	0	0	11	0	0	0
Osteomyelitis	117	0	81	0	0	0
Osteotomy	0	0	10	0	0	0
Osteotitis	0	0	4	0	0	0
Otitis Media	0	0	13	0	0	0
Ovariotomy	114	0	13	0	0	0
Oophorectomy	85	0	6	0	0	0
Ovarian Cyst	125	0	16	0	0	0
Papilloma	0	0	10	0	0	0
Paracentesis	32	0	17	0	0	0
Paronychia	0	0	47	0	0	0
Paralysis	0	0	5	0	0	0
Perineorrhaphy	165	0	14	0	1	0
Periostitis	0	0	7	0	0	0
Peritonitis	0	0	2	0	0	0
Plastic	32	0	16	0	0	0
Phlebotomy	0	0	2	0	0	0
Plaster of Paris Cast	320	0	29	0	3	0
Polypus	67	0	15	0	1	0

	Approved H.	Deaths	Munic. H.	Deaths	Private H.	Deaths
Pneumothorax	102	0	11	0	0	0
Pleurisy	0	0	3	0	0	0
Prostatectomy	83	16	9	0	0	0
Prostascopy	0	0	3	0	0	0
Pyolectomy	0	0	1	0	0	0
Pyonephrosis	0	0	3	0	0	0
Pyloric Stenosis	0	0	6	0	0	0
Pyorrhea	527	1	19	0	21	0
Pterygium	0	0	13	0	0	0
Quinsy	0	0	4	0	0	0
Radium Treatment	50	0	11	0	0	0
Rectocele	0	0	8	0	0	0
Resect Rib	49	6	14	0	2	0
Resect Bowel	0	0	10	0	0	0
Resect Nerve	0	0	61	0	0	0
Salpingitis	255	5	7	0	0	0
Salpingectomy	0	0	18	0	0	0
Salpingo–Oophorectomy	0	0	9	0	0	0
Scar Removed	17	0	11	0	0	0
Sclerosis	0	0	1	0	0	0
Sequestrotomy	15	0	0	0	1	0
Septicaemia	0	0	0	0	0	0
Shorten Round Ligament	51	0	7	0	0	0
Sigmoidoscope	0	0	2	0	0	0
Sinus	32	0	15	0	1	0
Skin–graft	16	0	10	0	0	0
Skull Graft	0	0	3	0	0	0
Spina Bifida	0	0	2	0	0	0
Splenectomy	0	0	2	0	0	0
Sterility	0	0	8	0	0	0
Stones	0	0	8	0	0	0
Strabismus	0	0	8	0	0	0
Submucous Resection	102	0	19	0	2	0
Suture	255	0	11	0	0	0
Synovitis	0	0	5	0	0	0
Sympathectomy	0	0	2	0	0	0
Tenectomy	17	0	9	0	0	0
Transfusion	32	0	17	0	0	0
Testicle	17	0	17	0	0	0
Toe Nails	0	0	10	0	0	0
Thoracentesis	0	0	1	0	0	0
Thyroidectomy	304	8	18	0	3	0
Tonsillectomy	3237	2	810	10	312	0
T. & A.	2686	1	107	0	160	0
Trachelorrhaphy	49	0	4	0	1	0
Tracheotomy	0	0	4	0	0	0
Tuberculosis	0	0	3	2	0	0
Tumour	115	0	3	0	3	0
Turbinectomy	66	0	17	0	0	0
Typhoid Fever	0	0	3	0	0	0
Ulcer	51	0	11	0	0	0
Urethral Stricture	13	0	12	0	0	0
Urethral Caruncle	0	0	7	0	0	0
Urethral Calculus	0	0	3	1	0	0
Urethral Dilate	0	0	2	0	0	0
Ventral Suspension	289	0	28	0	1	0
Wart	0	0	3	0	0	0
Wounds	47	0	0	0	0	0
Varicocele	13	0	12	0	0	0
Varicose Veins	65	0	5	0	2	0
Venesection	0	0	0	0	0	0

NOTE:—Deaths from Cancer are in excess of the operations. Explanation is: Death from Cancer of kidney shows four, operation would be shown under nephrectomy. Gastero–enteristomies are done, later death occurs from Cancer.

In addition to the operations classified above the following operations were performed by the Travelling Clinic:

T. & A.	1,647
Circumcisions	74
Other Minor Operations	34

Director of the Provincial Laboratory

(Allan Rankin, C.M.G., M.D., D.P.H., *Provincial Bacteriologist.*)

The total number of examinations for the year was 40,054, an increase of 10,651 specimens. Co-operation with the University Departments has continued and the work of the Laboratory has thereby been facilitated. The chemical examination of water and milk has been carried out by the Provincial Analyst.

	Number Specimens 1928	Total
Communicable Diseases:		
Sputum	677	
Diphtheria	1,105	
Typhoid Fever	226	2,008
Waters:		
Bacteriological	873	
Bact. & Chemical	602	
Chemical	115	1,590
Milks:		
Bacteriological	939	
Bact. & Chemical	90	
Chemical	7	1,036
Mothers' Milk		31
Miscellaneous Examinations		1,800
Medico-Legal Examinations		37
Bloods for the Wasserman Test		12,264
Smears for the Gonococcus		2,655
Icterus Index Determination		2,578
Van Den Bergh Determination		2,578
Post-Mortems		68
Pathological Histological Material		6,002
Chicken Blood Examinations, B.W.D. Agglutinating Tests		7,475
Typhoid Vaccine Prepared		7,675—25 c.c.
Autogenous Vaccines Prepared		128—25 c.c.
B.C.G. Vaccine Prepared		218—10 c.c.
Poliomyelitis Serum Prepared		29—10 c.c.
Sputum, Diphtheria and Blood Containers Distributed		18,716
Water and Milk Containers Distributed		1,292
Number of Specimens Examined (Post-Mortems not included)		40,054
Vaccines Prepared		197,545 c.c.
Containers Prepared and Distributed		20,008

SERA DISTRIBUTED DURING 1928

Smallpox Vaccine	34,280 pts.
Diphtheria Antitoxin	1,476— 1,000 units
	490— 2,000 units
	775— 5,000 units
	1,090—10,000 units
Diphtheria Toxoid	612— 1 person
	551— 6 persons
	475—12 persons
Schick Tests	45—25 persons
Scarlet Fever Antitoxin	2,122— 2 c.c.
	851—15 c.c.
Scarlet Fever Toxin	405— 1 person
	295— 6 persons
Dick Tests	62—10 persons
Antipneumococci	1—50 c.c.
Tetanus	14—1,500 units
Antimeningitis	66—20 c.c. C.A.L.
	33—30 c.c. P.D. & Co.
Pertussis	14— 5 c.c.
	7—20 c.c.

ESTIMATED COMMERCIAL VALUE OF WORK IF MINIMUM CHARGE WERE MADE

Material.	Price per Specimen	No. of Specimens	Total
Sputum	$ 2.00	677	$ 1,354.00
Diphtheria	2.00	1,105	2,210.00
Typhoid Fever	2.00	226	452.00
Waters	15.00	1,590	23,850.00
Milks	5.00	1,036	5,180.00
Mothers' Milk	2.00	31	62.00
Miscellaneous Examinations	3.00	1,800	5,400.00
Medico–Legal Examinations	5.00	37	185.00
Bloods for the Wassermann Test	5.00	12,264	61,320.00
Smears for the Gonococcus	2.00	2,655	5,310.00
Icterus Index Determination	1.00	2,578	2,578.00
Van Den Bergh Determination	1.00	2,578	2,578.00
Pathological Histological Material	5.00	6,002	30,010.00
Chicken Blood Examinations, B.W.D. Agglutinating Tests	.10	7,475	747.50
Typhoid Vaccine (25 c.c. quantity)	1.00	307	307.00
Autogeneous Vaccine (25 c.c. quantity)	15.00	128	1,920.00
B.C.G. Vaccine	3.00	218	654.00
Poliomyelitis Serum (10 c.c. quantity)	5.00	29	145.00
Total		40,054	$144,262.50

Public Health Nursing Branch

(Elizabeth Clark, R.N., *Superintendent*)

A generalized system of Public Health Nursing has been maintained in three districts in the Province, viz.: Municipal District of Marquis No. 157, Municipal District of Richdale No. 274, and Municipal District of Norma No. 515, including the Towns of Vegreville, Minburn and Innisfree.

While this service is staunchly supported in the districts where it is established, on the whole municipal councils have not realized the benefits to be derived from such a service. The following is a report of work done by the three nurses:

First Inspection	1,601
Second Inspection	1,637
Classroom Inspection	125
No. not Vaccinated	1,044
No. with Defects	2,195
No. without Defects	1,051
No. Malnutrition	218
Vaccinations	71
Diphtheria Toxoid	790

Suspect Defective Conditions:	
Vision	320
Hearing	46
Adenolds	353
Tonsils	674
Teeth	1495

Symptoms of:	
Cervical Glands	9
Enlarged Thyroid Glands	211
Pink Eye	28
Other Eye Conditions	61
Flat Feet	2
Nasal Growth	1
Nervous Symptoms	20
Pediculosis	45
Scabies	53
Impetigo	23
Ringworm	5
Other Skin Conditions	14
Communicable or Infectious Diseases	114

Results Obtained:	
Glasses Fitted	42
Glasses Refitted	27
Tonsils Removed	69
Adenoids Removed	59
Dental Treatment	359
Surgical Treatment	11
Medical Treatment	62
Schoolroom Talks	96
Home Visits	199
Interviews	73
Child Welfare Clinics	5
Public Lectures	6

Visiting Nurses—One Municipality:	
No. Calls made	358
No. Consultations	126
No. Treatments	215
No. Medical cases	144
No. Surgical cases	42
No. Obstetrical cases	3

District Nursing.

During the year a new district was opened at Notikewin, one hundred miles north-west of Peace River. This district is rapidly being settled and a service is greatly needed. Lac La Biche district was re-opened in November. The year closes with seven districts served by district nurses:

STATISTICAL REPORT

No. Calls made	3098
No. Consultations	1762
No. Deaths	30
No. Treatments	1845
No. Medical cases	2172
No. Surgical cases	621
No. Obstetrical cases	80

Travelling Operative Clinic.

Only those districts organized in 1927 but not given the service were circularized. In all eighty-eight centres were reorganized. In our endeavor to cover the work, two incomplete units with a

surgical team operating between them were put in the field The staff consisted of a surgeon, two physicians, two dentists, six nurses and a truck driver.

The Department was fortunate in securing the services of Dr. R. T. Washburn, Medical Superintendent of the University Hospital, as surgeon.

STATISTICAL REPORT

School Survey:			
First Inspection	10,327	No. with Defects	8,141
Second Inspection	1,102	No. without Defects	3,591
Classroom Inspection	37	No. Malnutrition	703
No. not Vaccinated	8,116		
Suspect Defective Conditions:			
Vision	844	Tonsils	5,043
Hearing	254	Teeth	4,469
Adenoids	3,627		
Symptoms of:			
Enlarged Thyroid Glands	688	Eye Conditions	143
Tuberculosis	4	Skin Conditions	52
Nervous Symptoms	69	Posture	56
Pediculosis	89	Schoolroom Talks	81
Scabies	23	Home Visits	34
Impetigo	23	Interviews	163
Ringworm	10	No. Schools Inspected	480
Travelling Clinic:			
No. Examined	5,678	No. Minor Operations	34
No. T. & A. Operations	1,647	No. Prescribed for	525
No. Circumcisions	74	No. Referred to Family Physician	74
Dental Clinic:			
No. Examined	5,546	Prophylaxis	46
No. Treated	1,306	Extractions	2,543
Fillings	286	Extractions under Gen. Anaes	2,678

Travelling Child Welfare Clinic.

As in previous years, Miss Blanche Emerson and Miss E. M. Davidson conducted these clinics. In many districts the assistance of the local physicians was secured by the organization in charge of arrangements. Most encouraging to those engaged in the work is the improvement noted in the children from year to year, and also better informed mothers. A total of 805 babies and 919 pre-school children were examined by these nurses, making a total in all of 1,724 children.

Lecture and Demonstration.

(*Home Nursing and First Aid.*)

During the year one nurse was employed exclusively lecturing and demonstrating Home Nursing and First Aid to the women's organizations requesting same. This service has been most popular, as is evidenced by letters of appreciation received from these organizations. In all eighty-five lectures were given to a total attendance of 3,059.

Pre-natal Service.

One hundred and twenty-three expectant mothers received the complete series of pre-natal letters during the year. These letters have been much appreciated, and in many cases were forwarded on to relatives or friends.

Child Welfare Clinics.

The Child Welfare Clinics in Edmonton, Calgary, and Medicine Hat have been directed as usual by a Provincial Public Health Nurse. The Edmonton and Calgary Clinics show an increase in attendance from year to year. It is very encouraging to note that

many young mothers of foreign birth, especially Ukrainian, are attending these clinics.

Statistical Report.

EDMONTON CHILD WELFARE CLINIC

Total number in Attendance	5,484
Total number Babies in Attendance	4,649
Total number Pre-school Children	835
Total number of Clinics held	124
Average Attendance	44
Number of Babies on Roll	1,663
Number Pre-school Children	673
New Babies Admitted	848
Babies Re-admitted	4
Pre-school Children Admitted	167
Pre-school Children Re-admitted	56
Transferred from Baby Clinic to Pre-school Clinic	138
Number of Babies Discharged	466
Number of Pre-school Children	313
Number of Nurses' Visits	6,431
Number of Out-of-Town cases	95
Number of Babies Referred to Family Doctor	76
Number of Pre-school Children Referred to Family Doctor	38
Deaths of Babies under 1 year	11
Deaths of Babies in second year	5
Deaths Pre-school Children	5

CALGARY CHILD WELFARE CLINIC

Total number of Clinics held	124
Total Attendance since Clinic started November, 1922	34,489
Total number in Attendance to March 31st	6,475
Total number Babies in Attendance	5,171
Total number Pre-school Children	1,400
Total number Babies on roll	801
Total number Pre-school Children on Roll	873
Total number Nurses' Visits	2,452
New cases Admitted, Infants	653
New cases Admitted, Pre-school Children	195
Cases Re-admitted, Infants	5
Cases Re-admitted, Pre-school Children	54
Transferred from Infant to Pre-School	229
Infectious Diseases—Found at Clinic:	
Whooping Cough	2
Measles	1
Chickenpox	1
Infectious Diseases—Found in Home:	
Chickenpox	2
Measles	1
Mumps	1
Pediculosis	4
Mental Defective Suspects	7

DENTAL CLINIC

Number cases treated (2 under Gen. Anaesthetic)	241
Appointments not kept	62

EYE, EAR, NOSE AND THROAT CLINIC

Operations: Tonsils and Adenoids	48
Cataract	2
Adenoids only	2
Mastoid	2
Treatments: Eye	451
Ear	228
Nose and Throat	96
(Of these 115 were new cases)	
Refractions for Glasses	7
House Visits	1

Out-of-Town cases—Infants 53, Pre-school 11; Total 64. (These cases are examined by the Provincial Nurse, as they are not allowed the privilege of interviewing the City Doctors.)

MEDICINE HAT CHILD WELFARE CLINIC

Total number in Attendance	1,344
Totad number Babies in Attendance	980
Total number Pre-school Children	364
Total number new cases admitted, Infants	126
Total number new cases admitted, Pre-school	42
Total number Re-admitted, Infants	4
Total number Re-admitted, Pre-school	6
Total number Out-of-Town cases	54
Transferred to Pre-school Clinic	131

Referred to Family Doctor, Infants	11
Referred to Family Doctor, Pre–school	3
Number of Babies Discharged	44
Number Pre–school Children Discharged	148
Number of Babies on Roll	180
Number Pre–school Children on Roll	231
Number Deaths (Infants)	2
Total number of Visits	1,082
Number Clinics held	125
Average Attendance	11

Cause of Deaths:

Malnutrition	1
Diphtheria	1

Report of the Hospitals Branch

(W. B. Milne, *Supervisor.*)

On December 31st, 1928, there were 82 approved hospitals, 6 having been added to the approved list during the year. A comparative statement of the Government grant paid to each of the approved hospitals is given below.

Hospitals.	Grants. 1927.	1928.
Athabasca Municipal	$ 2,085.50	$ 1,954.00
Banff Sanatorium (App. July, 1927)	549.00	2,530.00
Barrhead (App. January, 1928)	.....	915.50
Bassano Municipal	2,575.00	3,114.00
Bentley Community	692.00	745.00
Berwyn Cottage (App. December, 1928)	.....	108.50
Bonnyville Katharine Prettie	701.50	570.50
Bonnyville St. Louis	1,191.00	1,117.50
Calgary General	30,523.50	33,784.00
Calgary Holy Cross	21,547.00	24,516.00
Calgary Isolation	4,019.50	5,531.50
Calgary Junior Red Cross	9,767.00	9,515.00
Calgary Salvation Army	1,659.50	2,178.50
Calgary Smallpox	449.50	45.50
Camrose St. Mary's	4,835.00	5,678.00
Cardston Municipal	2,850.00	3,111.00
Castor Our Lady of the Rosary	3,329.00	2,823.00
Cereal Cottage	702.00	907.00
Claresholm General	2,103.50	1,757.50
Cold Lake John Neil	506.00	566.50
Coleman Miners' (App. December, 1927)	27.00	1,548.50
Consort Red Cross	1,525.00	2,097.50
Coronation General	2,173.00	2,465.00
Didsbury General	1,387.50	1,313.00
Drumheller Municipal	7,984.00	9,810.50
Edmonton Beulah Home	1,189.00	1,824.50
Edmonton General	28,010.50	28,412.00
Edmonton Isolation	7,594.50	5,007.50
Edmonton Misericordia	18,124.50	21,652.50
Edmonton Royal Alexandra	40,730.00	50,946.50
Edmonton Salvation Army Grace	1,821.50	2,806.00
Edmonton University (S.C.R.)	8,526.50	11,786.00
Edmonton University (Civilians)	18,394.00	17,070.00
Edmonton University (Orthopaedic)	7,986.00	8,130.00
Edmonton University (Orthopaedic Extra)	265.50	206.00
Edson St. John's	1,396.00	1,483.50
Elk Point General (Munic., December, 1928)	2,312.50	2,416.00
Empress Cottage	1,750.50	1,942.00
Fairview	358.00	679.50
Forestburg Cottage	770.00	716.00
Fort Vermilion St. Theresa	964.50	1,345.00
Fort McMurray Presbyterian	35.00	17.50
Galahad St. Joseph's (App. September, 1928)	7.50	676.50
Gleichen General	584.00	119.00
Grande Prairie Municipal	3,352.00	3,991.00
Grouard St. Joseph's	1,086.50	1,621.50
Hanna Municipal	5,745.00	6,765.50
Hanna—Sub. Craigmyle	.....	653.50
High River Municipal	4,332.50	4,549.50
High River—Sub. Blackie	714.50	482.50
Innisfail Municipal	3,323.00	3,108.00
Islay Municipal	1,855.50	1,912.00
Lacombe General	1,610.00	1,907.50
Lamont Public	9,961.00	10,392.50
Lethbridge Galt	10,101.50	10,506.50
Lethbridge Isolation	606.50	321.50
Lethbridge Van Haarlem	821.50	3,665.00
Lloydminster Municipal	4,318.00	4,387.00
Macleod General	6,301.00	1,868.50
Mannville Municipal	1,638.00	1,597.00
Medicine Hat General	10,263.00	14,081.50
Medicine Hat Isolation (App. January, 1928)	.....	573.00
Nordegg General	789.00	662.00
Nanton, Mrs. Millward (App. December, 1927)	13.50	439.00
Olds General	824.00	1,140.50
Onoway Municipal	875.50	832.50

Hospitals.	Grants. 1927.	1928.
Peace River Irene Cottage	$ 770.50	$ 1,364.50
Provost Municipal	2,181.50	2,358.00
Pincher Creek St. Vincent's	858.00	1,004.00
Red Deer Municipal	2,784.50	3,986.00
Radway General	856.50	1,463.00
Rife (Closed 1928)	60.00	.....
St. Paul St. Theresa	1,617.00	3,497.00
Smoky Lake Geo. McDougall	1,502.50	1,434.50
Stettler Sisters (Closed 1928)	886.50	.....
Stettler, Mills	719.50	1,634.50
Trochu St. Mary's	1,594.50	1,538.00
Vegreville General	4,977.50	6,298.50
Vegreville R. M. Boswell's	2,069.00	2,308.00
Vermilion Municipal	3,772.00	3,909.50
Viking Municipal	1,792.50	2,077.00
Vilna General	500.00	753.50
Wainwright Municipal (App. June, 1928)	.....	1,244.00
Wayne General	1,142.50	1,237.00
Westlock Immaculata	737.00	2,403.00
Wetaskiwin General	2,193.50	2,239.50
	$343,549.00	$392,146.00
SPECIAL GRANTS:		
Woods Christian Home, Calgary	1,250.00	1,250.00
Home of Good Shepherd	750.00	750.00
St. Mary's Home	500.00	500.00
Youville Convent, St. Albert	500.00	500.00
University Hospital	20,000.00	20,000.00
Lethbridge Galt	500.00	500.00
Beulah Home	500.00	500.00
	$367,549.00	$416,146.00
Increase, 1928		$48,597.00

Nineteen municipal hospitals were in operation at December 31st, 1928. These include the sub-hospitals at Blackie and Craigmyle. During the year new hospitals were completed at Elk Point, Vulcan and Wainwright, and Grande Prairie Hospital was under construction. During the year an amended scheme was submitted to the ratepayers of the Stettler district and passed by a good majority. The proposal to establish a hospital district at Sedgewick was defeated.

A statement showing the details of the work carried on in the municipal hospitals for the year 1928 is given below:

MUNICIPAL HOSPITALS—JANUARY 1-DECEMBER 31, 1928

DISTRIBUTION OF MUNICIPAL SERVICES

No. of Hospital	Name	No. of Beds	Patients Admitted	Hospital Days	Maternity Cases	Minor Operations	Major Operations	
1	Mannville	10	351	3,167	46	77	22	
2	Vermilion	18	657	8,418	107	80	44	
3	Drumheller	82	2,033	21,379	253	393	142	
4	Islay	16	294	3,823	56	40	3	
5	Cardston	20	771	6,123	155	204	42	
6	Bassano	18	618	6,333	96	160	57	
7	Onoway	7	148	1,607	37	10	....	
8	Lloydminster (United)	40	1,200	17,787	177	134	72	
9	Hanna	50	1,353	14,897	138	327	155	40 fractures.
	Hanna, Craigmyle	10	112	1,307	16	20	....	
10	Viking	14	461	4,163	96	113	23	
11	High River	21	934	10,067	132	188	98	
	High River, Blackie	5	.....	.....	.....	....	....	
12	Provost	14	529	5,081	79	76	31	
13	Athabasca	15	298	3,914	97	48	6	
14	Grande Prairie	20	783	7,982	116	227	130	
15	Red Deer	35	672	7,989	46	142	178	
16	Innisfail	18	604	6,216	169	166	82	
17	Wainwright	15	184	2,790	45	22	11	Opened June 1, 1928
18	Elk Point	16	57	517	5	14	3	Opened Dec. 1, 1928
19	Vulcan	20	33	238	1	....	1	Opened Dec. 19, 1928
		464	12,092	133,798	1,867	2,441	1,100	

Charity and Relief Branch

During the year 618 investigations were made for this branch by the Provincial Police. Relief was given in 1,014 cases—1,629 individuals receiving aid.

There were 495 persons on temporary relief and 253 on permanent relief, relief being discontinued to 260 individuals; 47 medical accounts and 49 hospital accounts were paid; 111 people received clothing; 34 were referred to the outdoor clinic; 157 transportations were provided and 13 deportations recommended. There were 14 cases of desertion brought to the attention of the Department, and food and lodging were found for the children and parents.

Eighty-two persons were maintained at the Salvation Army Hostel, these being mostly transient indigents recommended by the outdoor clinic for temporary relief.

The following were taken care of at the Homes for Incurables:

Salvation Army Eventide Home, Bonnie Doon	31
Salvation Army Eventide Home, Gleichen	58
Salvation Army Eventide Home, Calgary	15
Macleod General Hospital (Incurable Ward)	17
Providence Hospital, Daysland	19
Lacombe Home, Midnapore	9

Of the above incurables, 9 were bedridden cases.

Eleven cases were provided for at the Salvation Army Grace Hospital.

This Department was called upon to provide temporary relief to the unemployed during the fall and early winter of 1928. This relief was provided to 100 men, who were given 440 meals and 220 bed accommodations. This temporary relief is in addition to that mentioned above as having been granted through the Salvation Army Hostel.

Division of Social Hygiene

(Harold Orr, O.B.E., M.B., D.P.H., *Director*)

Education and Publicity.

Much of the publicity work undertaken with a view to moulding public opinion is done by the Canadian Social Hygiene Council, of which there are local branches in the province, and two paid secretaries. This organization receives a small grant from the Provincial Government, and its activities vary from time to time, but on the whole it has done, and is doing, very useful work.

We possess a library of self-explanatory films on social hygiene which do not require the services of a special lecturer. These have been shown by the Department of Extension of the University of Alberta in all parts of the province. In addition to this, we have maintained during the past four years a full-time lecturer, who has fairly thoroughly covered the whole province in his lecture tours. In this way our population has become more or less familiar with this question in its various phases.

Treatment.

We have established well-equipped clinics in Medicine Hat, Lethbridge, Calgary and Edmonton. These clinics are open to all, regardless of their ability to pay. Most of our country cases are able to attend one or other of these clinics, but we do have to deal with the problem of the treatment of poor people living in remote parts of the country. These patients, so long as they are infectious, are treated by their local doctor at the Government expense until such time as they become non-infectious, after which we supply all the medicines free of charge, but the doctor's fee for administering them must be paid by the municipality in which the patient resides.

We have special machinery for dealing with certain classes of the community. For example, all persons who are arrested on certain specified charges (which include all charges in any way associated with prostitution) must be examined for venereal disease. Any person found to be infected with venereal disease must be detained until he or she becomes non-infectious; and this detention and treatment becomes effective whether or not the person is found to be guilty of the charge on which he or she was arrested.

All inmates of our various governmental institutions, such as gaols and mental hospitals, are examined on admission, and any infected individuals treated.

An important part of the venereal disease control is the follow-up work. In our clinics a careful social history is taken of each case, and an effort made to deal with the source of infection.

Although we have the power of making an examination of a suspected individual it is very rarely necessary to use it. Our policy is to have the suspected individual interviewed by the social

service worker, and with very few exceptions, the patient voluntarily comes to the clinic for examination and treatment.

Every clinic has to deal with the problem of persons discontinuing treatment before being cured. Our troubles with regard to this, however, have been surprisingly few, and our extensive educational work has been an important factor in this respect.

The following figures briefly indicate the treatment work done during the year:

EDMONTON CLINIC, 9912 103rd Avenue.

Number of Patients		506
Sexes of Patients: Male	427	
Female	79	

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Adult: Male	120	207	.....	427
Female	29	50	.....	79
Totals	149	357	.....	506

Number and results of Wasserman Tests: 1,707 tests, of which 508 were positive.

CALGARY CLINIC, Third Floor, New Police Building.

Number of Patients		484
Sexes of Patients: Male	419	
Female	65	

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Adult: Male	69	338	12	419
Female	25	40	.....	65
Totals	94	378	12	484

Number and results of Wasserman Tests: 992 tests, of which 210 were positive.

MEDICINE HAT CLINIC, General Hospital.

Number of Patients		33
Sexes of Patients: Male	30	
Female	3	

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Adult: Male	4	20	6	30
Female	1	2	....	3
Totals	5	22	6	33

Number and results of Wasserman Tests: 93 tests, of which 40 were positive.

LETHBRIDGE CLINIC, Galt Hospital.

Number of Patients		34
Sexes of Patients: Male	32	
Female	2	

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Adult: Male	9	23	....	32
Female	....	2	....	2
Totals	9	25	....	34

Number and results of Wasserman Tests: 38 Tests, of which 4 were positive.

LETHBRIDGE GAOL, Lethbridge.

Number of Patients		62
Sexes of Patients: Male	62	

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Adult: Male	41	21	....	62

Number and results of Wasserman Tests: 850, of which 65 were positive.

FORT SASKATCHEWAN GAOL, Fort Saskatchewan.

Number of Patients		161
Sexes of Patients: Male	94	
Female	67	

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Adult: Male	54	40	....	94
Female	43	24	....	67
Totals	97	64	....	161

Number and results of Wasserman Tests: 1,185 tests, of which 224 were positive.

CASES REPORTED BY DOCTORS IN THE PROVINCE.

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Male	71	157	....	228
Female	21	34	....	55
Totals	92	191	....	283

RECAPITULATION.

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Male	368	906	18	1292
Female	119	152	....	271
Totals	487	1058	18	1563

Total, 1,563.

Public Health Education Division

(F. T. Cook, *Lecturer*)

Greater emphasis was placed on health education than in previous years, and a great deal of work was accomplished in assembling material, building up film and slide libraries, issuing bulletins, production of charts, reviewing, indexing and distributing literature, and in general preparation for a more extensive programme.

On April 1st, Mr. F. T. Cook was withdrawn from the Division of Social Hygiene and appointed as lecturer in the general field of Public Health, and was given an office in the Parliament Buildings. In addition to lecturing the duties of a general direction of the work of health education was assumed.

The demands for this type of work are growing, as is indicated by the ever-increasing number of requests for lectures, literature, health exhibits, etc.

The division of Social Hygiene has for some years been doing public work of an educational nature, both by lectures and moving pictures, with the result that an interest in this phase of the work has been created in all parts of the province. It has been demonstrated during the year that other phases of public health are equally interesting and instructive when given in the same way. Besides Social Hygiene, two other types of lectures have been given, one dealing with the various activities of the department and one designed to meet the needs of children and young people, requests for both of which are increasing. Either moving pictures or lantern slides are shown whenever possible.

During the year 50 lectures were given to a total of 4,900 people. Itineraries included the following districts: Grande Prairie, Lac La Biche, Athabasca, Vegreville, Vermilion, Jarvie, Edmonton, Olds, Oyen and Calgary.

Provincial Sanitary Engineer

(R. B. Owens, B.A., B.E., *Provincial Sanitary Engineer*)

The following is a detailed list of works for which Provincial Board of Health Certificates have been issued, together with the estimated cost of each:

WATERWORKS.

Coleman—Certificate No. 259–28, Improvements to Water System. Estimated Cost	$16,287.00
Delia—Certificate No. 252–28, System of Waterworks. Estimated Cost	1,200.00
Edmonton—Certificate No. 255–28, Improvement to Waterworks System. Estimated Cost	69,500.00
Edmonton—Certificate No. 256–28, Extensions to Waterworks System. Estimated Cost	16,409.00

SEWERAGE.

Calgary—Certificate No. 254–28, Sewer Extensions. Estimated Cost	1,048.00
Calgary—Certificate No. 257–28, Sewer Extensions. Estimated Cost	1,665.00
Drumheller—Certificate No. 262–28, Sewer Extensions. Estimated Cost	39,935.00
Edmonton—Certificate No. 250–28, Storm Water Sewers. Estimated Cost	15,000.00
Edmonton—Certificate No. 263–28, Storm Sewer Extensions. Estimated Cost	100,000.00
High River—Certificate No. 258–28, Sewer Extensions. Estimated Cost	11,375.00
Lethbridge—Certificate No. 260–28, Sanitary Sewers. Estimated Cost	1,064.61
Ponoka—Certificate No. 253–28, Storm Water Sewer Extensions. Estimated Cost	2,820.00

Plans and specifications submitted to the Provincial Board of Health for waterworks, sewerage and sewage disposal plants as required under Sections 10, 11, 12, 13, 14 and 15 of the Public Health Act, were duly examined, and where approval was given certificates were issued.

Plans and specifications other than those aforesaid, but required by the Provincial Board of Health, were also examined and the necessary action taken thereon.

Plans, specifications and proposals in connection with the sanitary engineering works submitted to the Public Utilities Commission were also examined and advice given.

Plans and specifications in connection with sanitary engineering works connected with hospitals under the Hospitals Act and Private Hospitals Act were examined and advice given thereon.

Sanitary engineering works in connection with the institutions under the administration of the Public Works Department were visited and advice given where necessary.

During the year reports on the analyses of water and ice were examined and, where necessary, action in the matter of prohibiting the use of the supply was taken, or an investigation made for the purpose of advising as to a remedy.

Under the Sanitation Section of the Sanitary Engineering Branch of the Department, the following work was carried out by our three inspectors:

One hundred and ninety-five health districts were visited and inspected. Of this number one hundred and sixty-two were visited and inspected a second time.

One hundred and eighteen lumber, tie, sawmill and mining camps were visited and inspected. Of this number thirty-four were inspected a second time.

Two hundred and thirty-seven Notices to Abate Nuisance were issued and served by the inspectors, and forty-two were ordered issued by representatives of the local health authorities.

Ten prosecutions were carried out and convictions were obtained in each case; fines varying from $5.00 to $30.00 being imposed in addition to costs.

Thirty-four samples of water were collected for examinations and analyses.

Twenty-three waterworks and sewage disposal systems were inspected.

Six hundred and four pounds of meat were seized and destroyed as unfit for food for human consumption.

Eighty-six complaints and requests for services of inspectors were received and satisfactory adjustments were made in each case. Requests for inspectors were to assist in locating suitable locations for nuisance grounds, hospital sites, stockyards, etc., and for further inspections of the district.

The services of one inspector were used in vaccinating against smallpox in unorganized and scattered communities.

The services of the inspectors have been used in investigations of outbreaks of infectious and contagious disease.

In addition to the above, one inspector has been on part time dealing with office routine with respect to the new system of supervision of purchasing, adopted by the Department at the end of the year 1927.

Dental Report

(A. E. Heacock, L.D.S., D.D.S., *Dentist*)

During the year dental service was provided at the Provincial Mental Hospital, Ponoka; the Provincial Mental Institute, Oliver; the Central Alberta Sanatorium, Calgary; the Provincial Training School, Red Deer; and the Provincial Special Hospital, Edmonton.

Two additional men were employed during the summer, Dr. Gilchrist being engaged on the staff of the Provincial Travelling Clinic, and Dr. Husband caring for the work in the institutions.

The clinic was in operation from May 7th until November 2nd, and after this time Dental Clinics only were conducted at three points, viz.: Peers, Hattonford and Jarvie.

Central Alberta Sanatorium, Calgary

(A. H. Baker, M.D., *Medical Superintendent*)

The anti-tuberculosis work of the Department of Health centres about the Central Alberta Sanatorium. During the year 1928 the institution has been continuously filled to capacity, and the scope of the follow-up department has been widened.

Patients are admitted to this institution by the direction of the Minister of Health, and any resident of the province may be admitted for treatment, irrespective of his or her financial condition. The various municipalities or local districts are responsible for the maintenance of their residents in the institution, but they may, if they see fit, collect in whole or in part the $1.50 per day charged by the department for the treatment and maintenance. The balance of the per diem cost is borne by the general provincial funds.

Sanatorium Treatment.

The treatment, as carried out at the Sanatorium, is of two types —hospital and sanatorium. Tuberculosis in all its phases and stages is admitted, although preference is given to pulmonary tuberculosis cases and to others considered especially infectious. In addition to the routine rest and dietetic treatment, artificial pneumothorax is extensively used, both artificial and natural heliotherapy, and other types of treatment as indicated in certain cases. The X-ray and clinical laboratories are well equipped and extensively used in the diagnosis of disease and in the determination of its progress.

Follow-up Department and Diagnostic Service.

The Sanatorium operates a diagnostic service at the institution every Wednesday afternoon which is available to ex-patients and others. During the year 277 people were thus examined.

On April 5th, 1928, an examination centre was opened in Edmonton at the University Outdoor Clinic, and for some months this work was ably supervised by Miss Gould of the University Clinic. However, by November arrangements had been made with the Kinsmen's Club of Edmonton whereby from the proceeds of their Christmas Seal Sale they engaged a full-time nurse to devote her energies to tuberculosis work. Accordingly Miss C. Davidson was engaged. A physician from the Sanatorium visits Edmonton on the first and third Fridays of every month and examines all patients presenting themselves at the clinic. Last year 175 persons were so examined. It is felt that the increasing activity and interest in tuberculosis work in Edmonton is very largely due to the interest taken by the Kinsmen's Club in providing funds for the engagement of a full-time nurse in tuberculosis.

On May 2nd, 1928, a similar centre was opened in Calgary under the auspices of the Calgary Tuberculosis Society. This organization likewise provides funds through a Christmas Seal Sale for the employment of a full-time nurse, Miss Acton. Medical examinations are done each Wednesday afternoon at the Tuberculosis Bureau in the City Health Department by one of the Sanatorium physicians. During the year 179 persons have been examined. In Calgary, as in Edmonton, this tuberculosis work is carried out with the full co-operation of the City Health Department.

Regular clinics at less frequent intervals have been held in several of the larger centres in the province. In order that all parts of the province may receive assistance, a travelling diagnostician is attached to the Sanatorium staff, and at intervals throughout the year he visited various towns and held consultations with the practising physicians. Formerly the travelling diagnostician was employed by the Provincial Tuberculosis Association, but on the 1st of September he was taken on the strength of the Sanatorium staff. Last year Dr. Armstrong covered the province from Peace River to the boundary, travelling approximately 5,225 miles. One hundred and ten physicians practising in the small centres were interviewed and 244 persons examined.

An important phase of this work is the regular follow-up of discharged patients and of contacts by means of questionnaires and arrangements for their examination at stated intervals. This applies to the families in which it is known that tuberculosis has been present, although the afflicted member may never have entered the Sanatorium for treatment. It is the aim of the department to supply not only efficient treatment, but also to make available to the greatest extent possible, diagnostic facilities for the detection of tuberculosis in this province. As the result of the work done there is an increased interest taken in the whole tuberculosis question, and the number of applicants for treatment and the number of known cases being treated at home is constantly increasing.

The Medical Superintendent was granted six months' leave of absence in order to attend the International Tuberculosis Congress in Rome and to undertake post-graduate work. Leaving Calgary on August 19th, he joined in Montreal the group of Canadian tuberculosis men who visited Scotland, Wales, England, France, Switzerland and Italy, in a study of tuberculosis and other public health matters. Splendid facilities were offered in all countries visited by the leaders in health work for the inspection and study of all phases of tuberculosis work. It was found everywhere that more and more attention was being paid to the diagnosis of tuberculosis and to the proper supervision of the known cases, especially those not in institutions.

The importance of increased accommodation for tuberculosis patients in this province is one which cannot be urged too strongly at the present time. As has been reported previously the number of Sanatorium beds in this province is much below that in any of the other three Western provinces:

	Beds.	Population to each bed provided.
Alberta	187	3374
British Columbia	345	1690
Manitoba	391	1675
Saskatchewan	470	1811

British Columbia will have 100 additional beds available by February 1st, 1929. Saskatchewan is building another Sanatorium at Prince Albert with the capacity of 180 beds.

TOTAL NUMBER OF PATIENT DAYS		INFIRMARY DAYS	
D.P.N.H.	5,404	D.P.N.H.	3,506
Civilian	60,110	Civilian	45,868
Total	65,514	Total	49,374

Average patients per day 179.2

	Military.	Civilian.	Total.
Patients in Sanatorium January 1, 1928	13	170	183
Patients treated during 1928	42	352	394
Patients remaining in Sanatorium January 1, 1929	12	168	180

CLASSIFICATION ON ADMISSION OF 214 DISCHARGED PATIENTS

No disease	6	Tuberculosis, Inactive	7
Undiagnosed	9	Tuberculosis, Pulmonary	146
Non-tuberculous	37	Tuberculosis, non-Pulmonary	9

CLASSIFICATION ON ADMISSION OF 146 CASES OF ACTIVE PULMONARY TUBERCULOSIS

Minimal	12	Far Advanced	67
Moderately Advanced	41	Apparently Hopeless	26

CLASSIFICATION OF 128 "TREATED" CASES OF PULMONARY TUBERCULOSIS

		On Discharge.		
On Admission:		Benefitted.	Non-Benefitted.	Died.
Minimal	11	10	1	....
Moderately Advanced	40	33	6	1
Far Advanced	60	29	10	21
Apparently Hopeless	17	....	2	15

DIAGNOSIS OF NON-TUBERCULOUS CASES

Asthma and Chronic Bronchitis	3	Hypothyroidism	1
Bronchiectasis	2	Hydropneumothorax with Pulmonary Fibrosis	1
Chronic Bronchitis	1	Lues and Chronic Rhinitis	1
Abscess, pulmonary	4	Neurosis	1
Cardiac Irritability	1	Osteo-Sarcoma	1
Debility—Post-empyemic	4	Lympho-Sarcoma	2
Debility—Cause unknown	2	Pleurisy	1
Duodenal Ulcer with Left Basal Fibrosis from G.S.W.	1	Pneumonia, acute	1
Empyema—Nature uncertain	2	Pneumonia, chronic	2
Chronic Empyema of Antra and Asthma	1	Pulmonary Fibrosis—Post-pneumonic	1
		Septic Tonsils	4

CLINICAL LABORATORY EXAMINATIONS

Sputum—	
In-Patients	2186
Out-Patients	163
Staff	11
Total	2360
Urine	1481
Blood	305
Spinal Fluid	10
Feces	4
Guinea pig inoculations	16
Guinea pig autopsies	11
Other examinations	145
Total	4332

CHEST EXAMINATIONS AT SANATORIUM

In-Patients		1436
Out-Patients—		
Ex-patients	74	
Contacts	58	
Others	145	
		277
Staff		71

CLASSIFICATION OF EXAMINATION OF OUT-PATIENTS

	Ex-patients.	Contacts.	Others.	Total.
At Sanatorium	74	58	145	277
At Edmonton	25	18	132	175
At Calgary	32	97	50	179
Throughout Province	34	67	143	244
Total	165	240	470	875

X-RAY REPORT

Chest	715	Ankle	2
Abdomen	32	Hand	2
Spine	19	Foot	4
Knees	6	Thumb	1
Dental	49	Hips	3
Sinus and Antra	4	Pelvis	2
Shoulders	7	Legs	1

FLUOROSCOPIC

Chest	1363
Gastro-intestinal	309
Total	1672

Forty-two patients were given the Gastro-intestinal series during the year. One patient was given Barium enema.

HELIOTHERAPY REPORT

	No. Treated.	No. Treatments.
Sun Baths	83	4082
Air Baths	114	7350
Laryngeal Treatments	36	3611
Nasal Treatments	3	199
Pharyngeal Treatments	14	798
Tongue	2	95
Mercury quartz lamp treatments	83	9934

DENTAL REPORT

Eight visits were made to the institution. Summary of dental work done:

Patients examined	577	Fillings	230
Patients treated	295	Extractions	240
Prophylaxis	174	Plates	6

OPERATION ROOM REPORT

Pneumothorax—	
New cases commenced	8
Attempted unsuccessfully	9
Total number treated	39
Cases terminated	16
Refills	761
Aspiration with refills	47
Aspiration of plural cavity with irrigation	166
Irrigations—pleural cavity	31
Withdrawal of air in spontaneous pneumothorax	38
Injection—lipiodol, intratracheal	27
Injection—lipiodol, through sinus	1
Exploration of antra	6
Injection, intravenous, glucose and saline	13
Injection, neosalvarsan	3
Injection, intravenous calcium chloride	3
Lumbar puncture	12
Aspiration of ankle	22
Plaster casts applied	4

CLASSIFICATION ON ADMISSION OF PATIENTS DISCHARGED IN 1928 (214)

I. SEX:

Men	117
Women	97
Total	214

II. SOCIAL:

Married	103
Single	105
Widows	2
Widowers	4
Total	214

III. AGES:

Under 5 years	0
5 to 9 years	4
10 to 14 years	3
15 to 19 years	30
20 to 29 years	81
30 to 39 years	53
40 to 49 years	35
50 to 59 years	6
60 to 69 years	2
Total	214

IV. OCCUPATION (Women):

Housewife	49
Student	10
Nurse, graduate	4
Nurse-in-training	7
Waitress	3
Milliner	1
Marcellist	2
Saleslady	1
Bank Clerk	1
Teacher	4
Pianist	1
Egg-candler	1
Laboratory Technician	1
Housework	10
No occupation	2
Total	97

V. OCCUPATIONS (Men):

Taxi-Driver	3
Iron Worker	1
Farmer	30
Farm Hand	6
Upholsterer	2
Laborer	13
Store Clerk	4
Accountant	2
Salesman	4
Bookkeeper	1
Teamster	2
Railway Clerk	1
Barber	3
Section Hand	1
Surveyor's Assistant	1
Cook	1
Telephone Agent	1
Student	1
Schoolboy	5

Car Painter	1
Railroad Worker	2
Watchmaker	1
Mining Engineer	1
Merchant	4
Violin Teacher	1
Mechanic	2
Freight Agent	1
School Teacher	3
Carpenter	1
Ropemaker	1
C.P.R. Fireman	1
Miner	4
Painter	1
Janitor	2
Dental Mechanic	1
Fruit Vendor	1
Hotelkeeper	1
Druggist	1
Vulcanizer	1
Stickerman	1
Barrister–at–Law	1
No occupation	2
Total	117

VI. NATIVITY:

Alberta	39
Canada	55
England	26
United States	30
Sweden	4
Norway	3
Holland	1
Denmark	1
Scotland	12
Ireland	5
Russia	10
Wales	2
Austria	9
Ukrainia	4
Lapland	1
Poland	4
Roumania	1
Italy	2
Jugo–Slavia	1
Czecho–Slavia	2
Greece	1
Esthonia	1
Total	214

VII. LENGTH OF RESIDENCE IN ALBERTA AT TIME OF ADMISSION:

One week to one year	16
One year	4
Two years	8
Three years	8
Four years	1
Five to nine years	34
Ten to fourteen years	25
Fifteen to nineteen years	50
Twenty to twenty–four years	18
Twenty–five to twenty–nine years	9
Thirty to firty–five years	2
No record	1
Born in Alberta	38
Total	214

Provincial Mental Hospital, Ponoka

(E. H. Cooke, M.D., *Medical Superintendent*)

On the first day of January, 1928, there were in residence 954 patients (538 males and 416 females). At the close of the year there were 1055 patients (602 males and 453 females), an increase of 101 patients, 64 males and 37 females.

The admissions (including 7 observation cases) were 366 (232 males and 134 females), as against 328, including observation cases (212 males and 116 females), in 1927.

The discharges were 217 (135 males and 82 females), as follows:

	Male.	Female.	Total.
Recovered	49	29	78
Improved	72	45	117
Not improved	7	8	15
Not insane	7	....	7
Total	135	82	217

These discharges include 7 observation cases, all males, one transfer (male) to a provincial gaol, and 19 deportations to the following countries:

	Male.	Female.	Total.
Denmark	1	....	1
England	2	....	2
Finland	1	....	1
Germany	3	....	3
Hungary	1	....	1
Ireland	1	....	1
Jugo–Slavia	2	....	2
Poland	1	....	1
Norway	2	....	2
Roumania	1	1	1
Scotland	....	1	1
U.S.A.	....	2	2
	15	4	19

During the year 112 males and 78 females, a total of 190, were sent out on probation, and 9 males and 11 females were returned.

The recovery rate, based on the admissions (less those not insane) for the year, is, in the case of the males, 21.7% and in that of the females 21.6%. The recovery rate, therefore, is for both sexes 21.7%.

The total discharges amount to 59.2% of the admissions, as against 64.6% for 1927; the decrease being due to the larger number of mental deficiency and schizophrenia admitted.

The deaths were 67 (viz, 41 males and 26 females). The death rate based on the total number under treatment or observation (1,320) is for the males 5.3%, and for the females 4.7%, or, for both sexes, 5%.

There were 7 deaths each from general paralysis and pulmonary tuberculosis.

No cases of colitis (asylum dysentery) occurred during the year.

The table of nationalities (No. 6) shows that 34.9% were born in Canada, 22.6% in the British Isles, 12% in the United States, and Austria, Russia and Poland contributed 10.3%.

The drug addicts numbered 5, against 6 in 1927.

The following are the more important staff changes:

On March 5th Dr. F. F. Tallman, who had been relieving Dr. D. L. Dick at Oliver, resumed his duties at Ponoka. Dr. Dick had been in hospital since the previous November on account of fracture of his right leg below the knee, complicated by pulmonary embolism. The work at Oliver was then carried on until the end of April by the writer, and subsequently by Dr. R. B. Jenkins, of the Department of Public Health, until Dr. Dick's return to duty on June 3rd.

Dr. D. L. McCullough was absent throughout the year on study leave.

Dr. M. L. Stauffer was appointed temporary medical officer on March 5th, but resigned on May 31st in order to pursue post-graduate work in the United States.

Miss J. M. Calder, Assistant Superintendent of Nurses, resigned on April 7th, and was succeeded by Miss E. C. Seddon on May 7th. Miss Seddon resigned on September 8th, and was replaced by Miss Hazel Bennett on September 18th.

On April 31st, Mrs. M. J. Lendrum, Superintendent of Nurses, resigned, and Miss Margaret Stewart, a graduate of the Royal Alexandra Hospital, was appointed in her place on April 21st.

Two internes, Mr. Jas. A. Campbell and Miss Viola Rae, fifth year medical students from the University of Alberta, assisted in the medical work of the Hospital during the summer months, May to September.

On September 17th Dr. R. R. McLean was appointed medical officer, but, unfortunately, became ill on October 31st, and had not returned to duty by the end of the year.

On November 21st Dr. H. C. Furst was appointed as temporary medical officer.

During the year night supervisors were appointed on both the male and female side.

On September 12th a male patient was fatally injured by an attendant, who was subsequently tried, and found guilty of manslaughter and sentenced to five years' penal servitude. Arising out of this incident a detailed survey of the mental institutions in the province was made by Drs. C. M. Hincks and C. B. Farrar, who submitted a full report and recommendations.

Early in the year a sexual sterilization bill was passed by the Legislature, but its operation was postponed until 1929.

The following are the important constructions and improvements during the year:

The new pavilion building was completed on January 21st, and has since been used as a recreation hall for patients and staff.

A residence for the Medical Superintendent and a bungalow for a medical officer were erected on the front drive to the east and west of Dr. McCullough's house.

Work was begun on the new farm dormitory building. This building, planned to accommodate 40 patients and 16 employees, is situated on high ground, with a beautiful outlook and within a few minutes' walk of the barns. The advantages of this arrangement are obvious, as, in addition to providing a pleasant home for patients and employees who work on the farm, much time will be saved in transporting the patients and employees backwards and forwards between hospital and barns for meals and work.

Further measures were taken for fire protection by providing additional fire escapes, fire doors and hand extinguishers. (A complete fire alarm system was later instituted.)

The occupational carpenter with the help of patients constructed the following buildings: a staff garage to accommodate 30 cars, a concrete root-house 60 feet in length, between the barns, and a chicken-feed house.

The spur line to the power house was completed towards the end of the year.

The road in front of the cottages was boulevarded, and has added considerably to the appearance of these dwellings.

The lawn to the west of the main building was completely rebuilt, as the soil was poor and had become infested with weeds.

TABLE SHOWING MOVEMENT OF PATIENTS DURING 1928

	Male.	Female.	Total.
In Residence January 1, 1928	538	416	954
INCOMING			
Voluntary	10	1	
By Two Medical Certificates	9	15	
Admitted for Observation	7	....	
By Warrant	204	113	
By Order of Minister of Health	2	5	
			366
Returned from Probation	9	11	
Eloped and Returned	16	....	
			36
			1356
OUTGOING			
Probations	112	78	
Deportations	15	4	
Transferred to Provincial Jail	1	....	
Observation Cases Disposed of	7	....	
Eloped	17	....	
Deaths	41	26	
			301
Total in Residence December 31, 1928	602	453	1055
Total in Residence December 31, 1927	538	416	954
Increase in Residents	64	37	101

TABLE No. 1

SHOWING ADMISSIONS, DISCHARGES AND DEATHS DURING 1928

	Admissions.			Discharges.			Deaths.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
January	24	14	38	4	2	6	3	1	4
February	23	11	34	5	4	9	5	4	9
March	15	10	25	21	3	24	5	5	10
April	13	8	21	17	9	26	7	1	8
May	15	11	26	12	7	19	4	3	7
June	20	11	31	8	3	11	2	2	4
July	23	14	37	8	11	19	2	3	5
August	21	12	33	11	5	16	3	3	6
September	15	13	28	15	6	21	4	....	4
October	32	5	37	9	6	15	3	....	3
November	10	14	24	13	7	20	3	1	4
December	21	11	32	12	19	31	....	3	3
Total	232	134	366	135	82	217	41	26	67

TABLE No. 2

SHOWING THE CIVIL STATE OF PATIENTS ADMITTED DURING 1928

	Male.	Female.	Total.
Single	124	41	165
Married	86	81	167
Widowed	17	12	29
Divorced	5	....	5
Total	232	134	366

TABLE No. 3

SHOWING THE NATIONALITY OF THOSE ADMITTED DURING 1928

	Male.	Female.	Total.		Male.	Female.	Total.
Anglo–India	1	....	1	Jugo–Slavia	1	....	1
Austria	11	2	13	Lithuania	....	1	1
Belgium	2	....	2	Macedonia	1	....	1
Canada	86	52	138	Newfoundland	1	....	1
Czecho–Slovakia	2	....	2	Norway	7	2	9
China	1	....	1	Poland	11	3	14
Denmark	4	1	5	Russia	6	8	14
England	29	19	48	Sweden	6	2	8
France	....	5	5	Switzerland	1	....	1
Finland	1	1	2	Scotland	12	9	21
Germany	5	4	9	U.S.A.	30	14	44
Holland	1	1	2	Ukrainia	3	2	5
Hungary	1	2	3	Wales	1	3	4
Italy	....	1	1				
Ireland	8	2	10	Total	232	134	366

TABLE No. 4

PLACE OF RESIDENCE AT TIME OF COMMITTAL, 1928

	Male.	Female.	Total.		Male.	Female.	Total.
Alsask	1	....	1	Donnelly	....	1	1
Altario	....	1	1	Duchess	1	....	1
Athabasca	1	1	2	Drumheller	1	1	2
Artland	1	....	1	Enchant	....	1	1
Acme	1	....	1	Evansburg	....	1	1
Alexo	1	....	1	Ensign	1	....	1
Andrew	....	1	1	Edmonton	42	27	69
Armena	1	....	1	Fabyan	....	1	1
Airdrie	....	1	1	Falher	2	....	2
Alix	1	....	1	Forestburg	1	....	1
Amisk	....	1	1	Fort Chipewyan	1	....	1
Arctic Red River	1	....	1	Fort Saskatchewan	3	....	3
Ashmont	....	1	1	Grande Prairie	2	1	3
Banff	1	1	2	Gadsby	....	1	1
Bashaw	....	1	1	Garrington	1	....	1
Bawlf	1	....	1	Gleichen	1	1	2
Blackfalds	1	....	1	Glen Leslie	1	....	1
Blackie	1	....	1	Glenevis	1	....	1
Breton	....	1	1	Gibbons Siding	1	....	1
Big Valley	2	....	2	Glidehurst	....	1	1
Bittern Lake	1	....	1	Griffin Creek	1	....	1
Bon Accord	1	....	1	Grimshaw	1	....	1
Bowden	1	....	1	Good Fish Lake	....	1	1
Bow Island	....	1	1	Good Hope	....	1	1
Brooks	1	....	1	Grouard	3	....	3
Busby	....	1	1	Gunn	1	....	1
Bruderheim	1	....	1	Gwynne	1	....	1
Calgary	36	27	63	Halkirk	1	....	1
Calahoo	1	....	1	Hamlin	1	....	1
Camrose	1	....	1	Hardieville	....	1	1
Castor	2	1	3	Hardisty	....	1	1
Carlos	1	....	1	High River	1	....	1
Carolside	1	....	1	Hilda	....	1	1
Cardston	1	....	1	Hillsdown	1	....	1
Carstairs	....	3	3	Hope Valley	....	1	1
Carvel	1	....	1	Huxley	....	1	1
Charon	1	....	1	Hythe	1	....	1
Claresholm	1	1	2	Irma	....	1	1
Czar	1	....	1	Innisfail	....	2	2
Craigmyle	1	1	2	Innisfree	1	....	1
Cereal	....	1	1	Iron Springs	1	....	1
Chinook	1	1	2	Jasper	2	....	2
Coaldale	....	1	1	Junkins	1	....	1
Coleman	....	1	1	Keephills	....	1	1
Coronation	1	....	1	Kelsey	1	....	1
Coutts	1	....	1	Killam	1	....	1
Clover Bar	....	2	2	Kitscoty	1	....	1
Crossfield	....	1	1	Lacombe	1	....	1
Dalemead	1	....	1	Lamont	1	....	1
Daysland	2	....	2	Leduc	1	....	1
Dewberry	1	....	1	Legal	1	....	1
De Winton	....	1	1	Lethbridge	11	1	12
Didsbury	4	....	4	Limestone Lake	....	1	1
Donalda	1	....	1	Looma	....	1	1

	Male.	Female.	Total.		Male.	Female.	Total.
Loyalist	1	....	1	Styal	....	1	1
Lundbreck	1	....	1	Sylvan Lake	....	1	1
Macleod	1	2	3	Sedgewick	1	....	1
Mannville	1	....	1	Sexsmith	....	1	1
Marwayne	....	1	1	Stettler	2	1	3
Maughan	1	....	1	Sion	1	....	1
Maybutt	1	....	1	Smoky Lake	1	....	1
Mayerthorpe	1	....	1	Stony Plain	2	....	2
Medicine Hat	3	1	4	Tofield	2	....	2
Mewassin	....	1	1	Tomahawk	1	....	1
Midnapore	....	1	1	Trochu	....	1	1
Millet	1	....	1	Two Hills	1	....	1
Morinville	1	1	2	Valhalla Centre	1	....	1
Mundare	1	....	1	Vegreville	1	1	2
Neerlandia	1	....	1	Vermilion	1	....	1
Nevis	....	1	1	Viking	1	....	1
Olds	1	1	2	Vimy	1	1	2
Ohaton	1	1	2	Vulcan	1	1	2
Oyen	1	1	2	Wainwright	1	1	2
Peace River	1	1	2	Waterhole	1	....	1
Penhold	2	1	3	Waskatenau	1	....	1
Pincher Creek	1	1	2	Wattsford	1	....	1
P.A. Penitentiary	1	....	1	Waugh	1	....	1
Ponoka	1	2	3	Wayne	1	....	1
Red Deer	2	1	3	Weald	....	1	1
Rochester	1	....	1	Wembley	1	....	1
Rocky Mtn. House	1	....	1	Westlock	1	....	1
Roycroft	....	1	1	Wetaskiwin	4	1	5
St. Albert	....	1	1	Wimborne	1	....	1
St. Paul de Metis	....	2	2	Youngstown	1	....	1
Sarcee Reserve	1	....	1				
				Total	232	134	366

TABLE No. 5

SHOWING THE OCCUPATION OF THOSE ADMITTED DURING 1928

Occupation.	Male.	Female.	Total.	Occupation.	Male.	Female.	Total.
Agent	....	1	1	Labourer	85	....	85
Advertising Agent	1	....	1	Laundryman	1	....	1
Baker	1	....	1	Lithograph Printer	1	....	1
Bank Clerk	2	....	2	Livestock Commr.	1	....	1
Barber	1	....	1	Miner	5	....	5
Bridgeman	1	....	1	Mine Foreman	1	....	1
Book-keeper	1	1	2	None	7	9	16
Butcher	1	....	1	Nurse	....	1	1
Carpenter	8	....	8	Nurse, Probationer	....	1	1
Charwoman	....	2	2	Plasterer	1	....	1
Chef	1	....	1	Pedler	1	....	1
Clerk	2	1	3	Printer	1	....	1
Cook	1	....	1	Post Office Clerk	1	....	1
Contractor	2	....	2	Plumber	1	....	1
Cow-puncher	1	....	1	Priest	1	....	1
Domestic	....	8	8	Real Estate Agent	1	....	1
Engineer—				Salesman	4	....	4
Civil	1	....	1	Seamstress	....	1	1
Mechanical	1	....	1	Secretary	1	....	1
Stationary	2	....	2	Section Foreman	2	....	2
Steam	1	....	1	Stenographer	1	1	2
Egg-Candler	....	1	1	School Girl	....	1	1
Farmer	65	....	65	School Teacher	2	3	5
Florist	1	....	1	Storekeeper	2	....	2
Garage Man	1	....	1	Student, University	....	1	1
Grocer	1	....	1	Student	1	2	3
Harnessmaker	1	....	1	Tailor	3	....	3
Home	....	8	8	Trapper	4	....	4
Housekeeper	....	8	8	Teamster	1	....	1
Housewife	....	83	83	Truck Driver	1	....	1
Indian Chief	1	....	1	Veterinary Surgeon	1	....	1
Janitor	1	....	1	Waitress	....	1	1
Junk Dealer	1	....	1				
				Total	232	134	366

TABLE No. 6

Ages.	Male.	Female.	Total.	Ages.	Male.	Female.	Total.
10 to 15	1	4	5	56 to 60	14	6	20
16 to 20	11	10	21	61 to 65	3	4	7
21 to 25	35	11	46	66 to 70	17	7	24
26 to 30	26	18	48	71 to 75	2	2	4
31 to 35	34	16	50	76 to 80	5	1	6
36 to 40	20	12	32	81 to 85	1	....	1
41 to 45	28	22	50	86 to 90	1	....	1
46 to 50	21	15	36				
51 to 55	13	6	19	Total	232	134	366

TABLE No. 7

SHOWING STATISTICS OF HEREDITY IN THOSE ADMITTED DURING 1928

	Male.	Female.	Total.
Paternal Branch	17	25	42
Maternal Branch	17	14	31
Paternal or Maternal	31	20	51
Paternal and Maternal	5	3	8
Said not to be heredity	131	56	187
History Insufficient	31	16	47
Total	232	134	366

TABLE No. 8

SHOWING THE ALLEGED CAUSES OF THE ATTACK OF INSANITY, 1928

Alleged Causes.	Male.	Female.	Total.
Alcohol	12	3	15
Anaemia, Secondary	....	1	1
Cardiac Disease	....	2	2
Cardio–Renal Disease	3	....	3
Cardie–Vascular Degeneration	13	6	19
Child–bearing, too frequent	....	1	1
Childbirth	....	7	7
Carbon Monoxide	1	....	1
Constitutional Psychopathic Inferiority	2	9	11
Drug Addiction	5	....	5
Encephalitis Lethargica	2	1	3
Epilepsy	8	5	13
Goitre	1	1	2
Heredity	49	41	90
Heredity, Alcoholic	8	16	24
Heredity, Epileptic	5	4	9
Heredity, Suspected	2	....	2
Hyperpiesis	....	1	1
Ill–health	6	23	29
Injury to Head	3	3	6
Injury to other part	1	....	1
Influenza	3	4	7
Isolation	3	....	3
Menopause	....	6	6
Mental Deficiency	15	12	27
Mental Stress, Acute	12	14	26
Mental Stress, Prolonged	25	25	50
Not Known	34	10	44
Overwork	4	20	24
Pregnancy	....	6	6
Pyorrhoea	3	2	5
Senility	13	5	18
Syphilis	21	10	31
Temperament, Cycloid	13	17	30
Temperament, Schizoid	19	12	31
Temperament, Paranoid	8	3	11
Tuberculosis, Pulmonary	1	....	1
Tumor of Brain	1	1	2
Total	232	134	366

TABLE No. 9

SHOWING THE FORM OF MENTAL DISORDER IN THOSE ADMITTED DURING 1928

Form of Disorder.	Male.	Female.	Total.
SENILE PSYCHOSES:			
Simple Deterioration	2	3	5
Presbyophrenic type	....	1	1
Delirious and Confused Type	3	1	4
Depressed and Agitated Type	....	1	1
Paranoid states	3	....	3
Pre–senile type	....	1	1
PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS	11	2	13
GENERAL PARALYSIS:			
Tabetic type	1	....	1
Cerebral type	13	5	18
PSYCHOSES WITH CEREBRAL SYPHILIS	1	1	2
PSYCHOSES WITH HUNTINGTON'S CHOREA	2	1	3
PSYCHOSES WITH BRAIN TUMOUR	1	1	2
PSYCHOSES WITH OTHER BRAIN OR NERVOUUS DISEASES:			
(a) Encephalitis Lethargica—Sequelae—			
(1) Conduct Disorder	2	....	2
(2) Parkinsonian Syndrome	....	1	1
ALCOHOLIC PSYCHOSES:			
Acute Hallucinosis	7	1	8
Chronic Hallucinosis	1	....	1
Acute Paranoia	....	1	1

PSYCHOSES WITH OTHER SOMATIC DISEASES:			
Exhaustion Delirium	2	1	3
Delirium of unknown origin	5	2	7
Cardio-renal disease	1	1	2
Auricular Fibrillation	....	1	1
Sinusitis and Oral Sepsis	1	....	1
Otitis Media	1	....	1
Acute Chorea	....	1	1
Pneumonia—Lobar	1	....	1
Syphilis	1	....	1
Hyperthyroidism	1	....	1
MANIC-DEPRESSIVE INSANITY:			
Manic type	18	13	31
Depressive type	9	16	25
Mixed type	2	3	5
INVOLUTIONAL MELANCHOLIA	2	6	8
SCHIZOPHRENIA:			
Paranoid type	9	3	12
Catatonic type	49	21	70
Hebephrenic type	1	5	6
Atypical	1	2	3
PARANOIA OR PARANOID CONDITIONS	19	12	31
EPILEPTIC PSYCHOSES:			
Deterioration	2	2	4
Clouded states	6	2	8
Furor	....	1	1
PSYCHONEUROSES AND NEUROSES:			
Hysterical type	1	....	1
Psychasthenic type	2	....	2
PSYCHOSES WITH CONSTITUUTIONAL PSYCHOPATHIC INFERIORITY	11	7	18
PSYCHOSES WITH MENTAL DEFICIENCY	10	7	17
UNDIAGNOSED PSYCHOSES	....	2	2
NOT INSANE:			
Drug Addiction	5	....	5
Constitutional Psychopathic Inferiority without Psychosis	4	....	4
Mental Deficiency without Psychosis	6	6	12
Tabes Dorsalis	2	....	2
Homosexuality	1	....	1
Murder	1	....	1
Cardio-renal disease	1	....	1
Total	232	134	366

TABLE No. 10

SHOWING NUMBER ALLOWED OUT ON PROBATION AND RESULTS IN 1928

Results.	Male.	Female.	Total.
Recovered	47	29	76
Improved	63	42	105
Not Improved	2	7	9
Returned to Hospital	9	11	20
Still out at close of year	54	44	98

TABLE No. 11

RECORD OF DEATHS DURING 1928

Register No.	Sex.	Age.	Time in Hospital. Years.	Months.	Days.	Cause of Death.
1017	M	74	11	4	10	Carcinoma of Stomach.
3976	M	65	....	....	27	Broncho-Pneumonia.
3759	F	61	....	8	15	Pulmonary Tuberculosis.
3907	M	65	....	4	9	Broncho-Pneumonia.
2487	M	68	5	7	14	Chronic Myocarditis.
4030	M	34	....	....	13	Acute Confusional Insanity.
3989	F	69	....	1	19	Senile Dementia; Chronic Brain Atrophy.
3975	M	55	....	2	6	Carcinoma of Stomach.
4040	F	38	....	....	6	Acute Mania; Exhaustion; Childbirth.
2024	M	47	7	4	8	Pulmonary Tuberculosis.
3346	M	44	2	1	28	General Paralysis of the Insane.
3742	F	76	....	10	24	Senile Dementia; Chronic Brain Atrophy.
3991	F	76	....	1	27	Senile Dementia; Chronic Brain Atrophy.
3114	M	62	3	....	20	Cardio-vascular Degeneration; Syncope.
4022	M	69	....	1	9	Senile Dementia; Chronic Brain Atrophy.
4042	M	50	....	....	27	General Paralysis of the Insane.
4037	F	69	....	1	6	Chronic Myocarditis; Broncho-Pneumonia.
3791	M	28	....	9	19	Pulmonary Tuberculosis.
3647	F	53	1	3	13	Broncho-Pneumonia; Cerebral Syphilis.
3964	F	63	....	3	27	Pernicious Anaemia; Myocardial Degeneration.
2091	F	61	7	2	4	Acute Myocardial Failure; Carcinoma of Breast.
3768	F	76	....	10	26	General Arteriosclerosis; Chronic Myocarditis; Gangrene of fingers and toes.
4007	M	65	....	2	13	Fracture of right femur; Broncho-Pneumonia.

Register No.	Sex.	Age.	Time in Hospital. Years.	Months.	Days.	Cause of Death.
2777	F	58	4	7	13	Arteriosclerosis; Cerebral Thrombosis.
4076	M	15	....	....	24	Encephalitis Lethargica; Terminal Broncho–Pneumonia.
3788	M	24	....	10	21	Acute Lobar Pneumonia; Cardiac Failure.
4029	M	69	....	2	14	Broncho–Pneumonia; Senile Dementia.
3344	M	61	2	4	3	General Paralysis of the Insane.
56	M	67	16	10	2	Cardiac Decompensation; Chronic Myocarditis.
3705	M	46	1	2	20	Haemorrhage from gastric ulcer; General Paralysis of the Insane.
3530	M	62	1	9	4	Peritonitis; Strangulated direct inguinal hernia.
2320	F	32	6	6	1	Pulmonary Tuberculosis.
931	M	42	10	5	29	Broncho–Pneumonia; Exhaustion.
2276	F	80	6	8	2	Broncho–Pneumonia; Chronic Myocarditis.
4095	M	66	....	1	10	General Paralysis of the Insane.
3993	M	66	....	4	21	Senile Dementia; Chronic Brain Atrophy.
4092	M	60	....	1	20	Psychosis with Cerebral Arteriosclerosis.
4127	F	37	....	....	10	Exhaustion Psychosis; Chronic Intestinal Auto–Intoxication.
4116	M	70	....	....	29	Senile Dementia; Chronic Brain Atrophy.
2467	F	55	6	....	4	Huntington's Chorea complicated with Asthenia and Inanition.
1007	M	67	11	10	22	Acute Peritonitis; Perforated Gastric Ulcer.
131	F	57	16	11	1	Pulmonary Tuberculosis.
2290	M	37	6	9	6	Miliary Tuberculosis; Pulmonary Tuberculosis.
3764	F	80	1	2	15	Senile Dementia; Chronic Brain Atrophy.
320	M	34	15	7	8	Broncho–Pneumonia.
4071	F	28	....	3	18	Broncho–Pneumonia.
2717	F	39	5	1	20	Pulmonary Tuberculosis; Exhaustion.
4166	M	87	....	1	12	Senile Dementia; Chronic Brain Atrophy.
3862	F	64	1	....	3	Continual Excitement and Agitation; Exhaustion; Manic–Depressive Insanity.
4189	M	47	....	....	20	Broncho–Pneumonia.
4174	M	83	....	....	6	Senile Dementia; Chronic Brain Atrophy; Gangrene right leg.
4202	F	67	....	....	15	Chronic Myocarditis; Senile Dementia with Arteriosclerosis.
3728	M	40	1	5	5	Manic–Depressive Insanity (Depressive phase); Exhaustion.
1990	M	38	8	....	12	Suffocation during an epileptic convulsion.
4230	M	56	....	....	24	Broncho–Pneumonia.
3669	M	64	1	8	13	Cerebral Thrombosis; Syphilis and Arteriosclerosis.
4220	M	64	....	1	15	Senile Dementia; Chronic Brain Atrophy.
3132	M	63	3	7	14	Senile Dementia; Chronic Brain Atrophy.
373	M	55	15	5	23	Epileptiform attacks; syncope; Stokes–Adams Syndrome.
4131	M	47	....	....	3	Drug Addiction (Morphine); Exhaustion.
4289	M	38	....	....	21	General Paralysis of the Insane; Malarial Inoculation.
4258	M	77	....	1	29	Senile Dementia; Chronic Brain Atrophy.
4305	M	70	....	....	17	Senile Dementia; Chronic Brain Atrophy.
4322	F	42	....	....	4	Broncho–Pneumonia; Exhaustion of Acute Confusional Insanity.
3915	F	65	1	2	5	Auricular Fibrillation; General Paralysis of the Insane.
4313	F	53	....	1	....	Cerebral Haemorrhage; Arteriosclerosis.
3563	F	51	2	3	16	Pre–senile Psychosis; Chronic Brain Atrophy.

Provincial Mental Institute, Oliver

(D. L. Dick, M.D., *Medical Superintendent*)

On the first day of January, 1928, there were in residence 208 male patients. During the year there was one elopement, two probations and one death, leaving in residence on December 31st a total of 204 patients. The average number of patients in residence during the year was 205, and the average staff numbered 28. The total number of hospital days was 75,126. The daily cost per patient for the year was 69 cents. This is a slight increase over the previous year, but is explained by the fact that the "staff to patient" ratio is somewhat smaller than it was during 1927.

The general health of the patients and staff has been excellent. There have been no serious epidemics and no outbreaks of contagious diseases. The two patients probated during the year were both improved mentally, and both succeeded in making a satisfactory economic adjustment outside the hospital.

The useful occupation of patients in an institution of this type is important, and many of the patients are successfully occupied in the various services of the institution. All the patients spend as much time as possible in the open air, and this, no doubt, explains in some measure the excellent health of the patient population. An opportunity is offered the patient on the recreation field to engage in games such as football, baseball and cricket. There is also a moving picture shown once a week, and this is well attended and appreciated by both staff and patients.

The Medical Superintendent was incapacitated, due to an accident during the earlier months of the year; his place being filled by a member of the medical staff from Ponoka Hospital.

The work in the business office has been growing from year to year, and a full time store-keeper has been appointed.

Several extensions to the institution were made, including a service building, which was completed and occupied. This building contains store, refrigerator, bakery and accommodation for 21 members of the staff. There is also a billiard and recreation room for the staff. The completion of this building has afforded increased recreational facilities and better living quarters. An addition to the power-house and extension to the greenhouse was also built. A fire-alarm system has been installed and automatically actuates the siren at the power-house.

The gardens and grounds continue to uphold their reputation as one of the beauty spots of the district, and many improvements and extensions have been effected this year. The appearance of the front of the grounds has been much improved by the erection of an ornamental fence, and the road-side between the fence and trail rough-graded and cleared of weeds. New water service lines for the lawns have also been installed. A sheltered nursery, consisting of six sections and protected with a wattled willow windbreak, has

been developed and will be a great advantage in supplying table vegetables at an earlier date than was formerly possible.

MOVEMENTS OF PATIENTS, 1928

Month.	In Residence.	Eloped	Re-admitted.	Probated.	Deaths.
January	208	.....	.....	1 improved	1
February	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....
June	.....	.....	.....	1 improved	.....
July	.....	.....	.....	.....	.....
August	.....	1	.....	.....	.....
September	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....
December	204	.....	.....	.....	.....
		1	.....	2	1

RECORD OF DEATHS

Bronchial Pneumonia	1

SUMMARY OF DENTAL WORK DONE

Patients examined	205
Patients given treatment	137
Prophylactic treatments	125
Fillings	27
Extractions	73

PROVINCIAL MENTAL INSTITUTE, EDMONTON—SUMMARY, 1928

Average Patients, 205. Hospital Days, 75,126. Average Staff, 28.

DEBIT		CREDIT	
Food	$17,028.40	Storeroom Stock on hand Dec. 31st, 1928	$ 6,000.00
Laundry and Cleaning	1,185.16	Stationery Stock on hand Dec. 31st, 1928	325.00
Clothing	2,908.64	Drug Stock on hand Dec. 31st, 1928	240.00
Bedding	581.13	Vegetable Stock on hand Dec. 31st, 1928	1,200.00
Automobile Upkeep	455.56	Garden Equipment on hand Dec. 31st, 1928	884.00
Tobacco and Matches	661.59	Refunds:	
Garden and Grounds	554.93	Services and Supplies to staff	6,304.62
Office Expenses	335.26	Miscellaneous	1,082.28
Medical Supplies	194.98	Net Cost, 1928	51,977.88
Transportation, Freight, Express, Cartage	589.48		
Equipment	302.72		
Entertainment	602.71		
Church Services	225.00		
Miscellaneous	741.23		
Salaries	33,785.02		
Stock on hand Dec. 31st, 1927	7,861.97		
	$68,013.78		$68,013.78

Daily Cost Per Patient, 69 cents.

Provincial Training School, Red Deer

(W. J. McAlister, M.D., *Medical Superintendent*)

MOVEMENT OF PATIENTS IN 1928

	Male.	Female.	Total.
Number actually present Dec. 31, 1927	75	72	147
ADMISSIONS DURING THE YEAR:			
Voluntary Admissions	16	5	21
Court Commitments	....	1	1
Re-admissions	....	....	....
	91	78	169
DISCHARGES, ETC., DURING YEAR:			
Discharged	....	1	1
Died	6	2	8
Paroled	1	....	1
Number actually present Dec. 31, 1928	84	75	159

Wards of the province	23
Wards of municipalities	115
Wards of Department of Dependent and Neglected Children	3
Wards of Department of Municipal Affairs	11
Private cases	7

CASES OF MENTAL DEFECT REPORTED AND ON FILE AS AT DEC. 31, 1928

	Male.	Female.	Total.
Awaiting Admission:			
Application and Approval received (completed files)	33	31	64
Applications received, Approval out	18	18	36
Applications only (case under investigation)	34	27	61
Court Commitments awaiting admission	4	1	5
Number of Applicants awaiting admission	89	77	166
Mental Defective Suspects, reported but not investigated to date:			
Reported prior to 1923	108	77	185
Suspects reported prior to 1923 are not included in totals owing to uncertainty as to their present whereabouts.			
Reported during 1923	27	32	59
Reported during 1924	20	13	33
Reported during 1925	14	10	24
Reported during 1926	29	29	58
Reported during 1927	17	15	32
Reported during 1928	22	31	53
Sex unascertained	....	....	8
Total number of known Defectives on file	129	130	267

SUMMARY

Mental Defectives in residence at Red Deer	84	75	159
Mental Defectives in residence at Ponoka	....	....	72
Applicants awaiting admission	89	77	166
Mental Defective Suspects reported	129	130	267
Total number of known Defectives	....	....	664

INFIRMARY TYPE OF PATIENT

	Idiot. Male.	Idiot. Female.	Imbecile. Male.	Imbecile. Female.	Grand Total.
Requiring practically more or less personal attention	21	12	5	3	41

DEATHS

Name.	Sex.	Age. Yrs.	Age. Mos.	Mental Status.	Disease.
Bergman, Lester	M	17	....	Imbecile	Pulmonary T.B.C.
Chimuj, Anton	M	12	8	Idiot	Hirschsprung's Disease.
Goetz, Alfred	M	25	2	Idiot	Lobar Pneumonia.
Gearhart, Will	M	11	8	Imbecile	Acute Nephritis.
Anderson, Art	M	16	....	Idiot	Cerebral Oedema.
Malysh, Mary	F	6	2	Idiot	Inanition.
Poole, Robert	M	3	4	Idiot	Inanition.
Pust, Irma	F	16	6	Imbecile	Broncho-Pneumonia.

SUMMARY OF INFORMATION

Mental Status (Patients).		Disease Incidence in Family History.	
Idiot	82	Epileptic	5
Imbecile	60	Insanity	19
Moron	22	Mental Defect	67
M.D. and Psychotic	3	Neuropathic	17
M.D. and Psychopathic	1	Psychopathic	3
M.D. and Epileptic	36	Alcoholism	14
Mongolian	10	Syphilis	6
Borderline (Epileptic)	1	T.B.C.	10
		Deafness	3
		Mutism	1

BIRTHPLACE

	Parent. Father.	Parent. Mother.	Patient.	%
Alberta	....	4	103	65
Canada (not including Alberta)	47	45	26	17
England and Wales	22	25	6	4
Scotland	7	6	1	....
Ireland	4	3	....	....
United States	27	30	16	10
Other Countries	28	29	2	1
Unknown	21	15	5	3

General History.

The enrolment, as outlined under "Movement of Population," practically reached the maximum accommodation of the School as at December 31st, 1928.

The deaths recorded took place during the winter and early spring months, the season of the year when we usually have our maximum of disease and mortality. It will be noted that the cases which died were altogether of the low grade type. This is to be expected, as the low grade imbecile and idiot child lacks the resistance of the higher grade mental defective.

The number of cases of defectives and defective suspects on record have gradually increased. We have ceased to consider those who were recorded prior to 1923, as many of these have not been heard from for a number of years; hence, our figures prior to 1923 were very roughly approximate at best.

No special attempt has been made to add to the number of defectives as recorded. If this had been done there is no doubt but that a considerably larger number of cases would be on our files either for admission or for extra-institutional attention. It would be well if the department could at some time in the near future initiate a system of registration of mental defectives within the province. Until this is done we will never know just how many there really are, nor will we know how great the incidence of deficiency may be in the various parts of the province, and in the various communities. It would help, also, as a check in the migration of defectives from other provinces.

Practically all cases reported during the year were bona fide cases of mental defect, the majority of them being of school age. The Department of Education, through its inspectors and teachers, has co-operated quite satisfactorily in advising us of such cases as were attending schools who were decidedly backward and those who had not as yet attended school because of marked mental defect.

I also appreciate the co-operation of the Public Health Nursing Service Department in recording cases which came to its notice.

The institution continued very overcrowded until the middle of September, when it was decided to enlarge our infirmary by adding an east wing. This work was carried on through the fall and

winter, and gave us valuable space for the infirmary cases, and also provided store-room space in the basement wing.

Institutional Progress.

The work of the institution has been carried on throughout the year with a view to the maintenance of as high a standard as possible in the matter of administration and academic and vocational training of the children. The maintenance of a high standard in all the departments has not been easy, due to our crowded condition. We hope, however, that this will be remedied in the very near future.

The general health of the children has been very good. A morbidity of five per cent. cannot be considered high when the high per cent. of low grade cases which we have to deal with is taken into consideration.

Vocational work for the high grade girls especially has been stressed, with very satisfactory results. I am looking forward to are a number of municipalities which are rather remiss in meeting for our boys.

Playgrounds and institutional grounds have been maintained in a satisfactory manner. The high standard which we have set in general maintenance of institutional grounds and so forth has been of value in the employment of practically all of our adolescent and adult boys.

Maintenance revenue has been quite satisfactory, although there are a number of municipalities who are rather remiss in meeting their obligations along this line.

ERRATUM

The third paragraph from the bottom on this page should read:

Vocational work for the high grade girls especially has been stressed, with very satisfactory results. I am looking forward to the time when we shall be able to initiate a similar line of work for our boys.

Provincial Special Hospital, Edmonton

(F. H. H. Mewburn, M.D., *Medical Superintendent*)

The Provincial Special Hospital was officially opened on January 27th, 1928, and the first patients were admitted on January 31st. The capacity of the hospital is 60 beds, 15 of which are cots. Up until December 31st, the total number of patients admitted to the hospital was 104. During the calendar year of 1928 there was one death.

The Out-patient Department was opened on March 20th, 1928. Through the courtesy of the University Hospital authorities, we were allowed to use rooms in their Out-patient Department in Edmonton. The number of out-patients in 1928 was 80, and the number of treatments given was 572.

In the beginning the nursing staff on ward duty consisted entirely of graduate nurses. At the end of July a rearrangement of the staff was begun, and ward aids were introduced, so that at the end of the year the nursing staff on ward duty consisted of four graduate nurses and four ward aids. The ward aid is a new innovation in Edmonton hospitals, and in this institution has worked out very satisfactorily.

The massage and muscle training of the patients is carried out by three trained masseuses. During the year, 6,882 treatments were given in the hospital. In addition to the actual treatment of the paralytic condition, great stress is laid on the fresh air and sun treatment, the hospital being provided with wide verandahs and awnings so that every bed in the institution can be taken outside. This latter treatment started in March, 1928, and the last time the patients were taken out was the 24th of December.

A school teacher is on the staff, so that the patients' education will not be neglected, and they have some definite work to occupy their time.

The hospital has evoked considerable interest, not only in the province, but throughout Canada. We have received numerous gifts from the people of the province and inquiries regarding the hospital from all over Canada.